

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 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, 2023

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: 0-22705



NEUROCRINE BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

12780 El Camino Real

San Diego, CA

(Address of principal executive office)

33-0525145

(IRS Employer
Identification No.)

92130

(Zip Code)

(858) 617-7600

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value	NBIX	Nasdaq Global Select Market

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

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

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

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

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

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

The number of outstanding shares of the registrant's common stock, par value \$0.001 per share, was 97,652,450 as of July 26, 2023.

NEUROCRINE BIOSCIENCES, INC.

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Part I. Financial Information

Item 1. Financial Statements

NEUROCRINE BIOSCIENCES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

<i>(in millions, except share data)</i>	June 30, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 160.2	\$ 262.9
Debt securities available-for-sale	816.5	726.4
Accounts receivable	387.6	350.0
Inventories, net	31.7	35.1
Other current assets	100.6	79.1
Total current assets	1,496.6	1,453.5
Deferred tax assets	379.0	305.9
Debt securities available-for-sale	342.6	299.4
Right-of-use assets	83.5	87.0
Equity security investments	173.0	102.1
Property and equipment, net	65.6	58.6
Intangible assets, net	36.9	37.2
Other assets	35.9	25.0
Total assets	<u>\$ 2,613.1</u>	<u>\$ 2,368.7</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 391.6	\$ 347.6
Convertible senior notes	169.7	169.4
Other current liabilities	21.2	20.7
Total current liabilities	582.5	537.7
Noncurrent operating lease liabilities	89.1	93.5
Other long-term liabilities	88.5	29.7
Total liabilities	760.1	660.9
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5.0 million shares authorized; no shares issued and outstanding	—	—
Common stock, \$0.001 par value; 220.0 million shares authorized; 97.6 million and 96.5 million shares issued and outstanding, respectively	0.1	0.1
Additional paid-in capital	2,241.9	2,122.4
Accumulated other comprehensive loss	(1.1)	(7.9)
Accumulated deficit	(387.9)	(406.8)
Total stockholders' equity	1,853.0	1,707.8
Total liabilities and stockholders' equity	<u>\$ 2,613.1</u>	<u>\$ 2,368.7</u>

See accompanying notes to the condensed consolidated financial statements.

NEUROCRINE BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE INCOME (LOSS)
(unaudited)

<i>(in millions, except per share data)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Revenues:				
Net product sales	\$ 446.3	\$ 352.0	\$ 861.6	\$ 657.0
Collaboration revenues	6.4	26.2	11.5	31.8
Total revenues	452.7	378.2	873.1	688.8
Operating expenses:				
Cost of revenues	11.5	4.8	20.0	9.4
Research and development	145.8	135.9	285.3	238.1
Acquired in-process research and development	—	—	143.9	—
Selling, general and administrative	221.8	182.8	464.5	383.5
Total operating expenses	379.1	323.5	913.7	631.0
Operating income (loss)	73.6	54.7	(40.6)	57.8
Other income (expense):				
Interest expense	(1.3)	(2.2)	(2.4)	(4.8)
Unrealized gain (loss) on equity security investments	37.3	(7.4)	39.5	12.5
Loss on extinguishment of convertible senior notes	—	(70.0)	—	(70.0)
Investment income and other, net	12.0	1.6	21.8	2.6
Total other income (loss), net	48.0	(78.0)	58.9	(59.7)
Income (loss) before provision for (benefit from) income taxes	121.6	(23.3)	18.3	(1.9)
Provision for (benefit from) income taxes	26.1	(6.4)	(0.6)	1.1
Net income (loss)	95.5	(16.9)	18.9	(3.0)
Foreign currency translation adjustments, net of tax	0.9	—	2.1	—
Unrealized gain (loss) on debt securities available-for-sale, net of tax	0.7	(2.9)	4.7	(10.5)
Comprehensive income (loss)	\$ 97.1	\$ (19.8)	\$ 25.7	\$ (13.5)
Earnings (loss) per share:				
Basic	\$ 0.98	\$ (0.18)	\$ 0.19	\$ (0.03)
Diluted	\$ 0.95	\$ (0.18)	\$ 0.19	\$ (0.03)
Weighted-average shares outstanding:				
Basic	97.6	95.6	97.4	95.4
Diluted	100.2	95.6	100.3	95.4

See accompanying notes to the condensed consolidated financial statements.

NEUROCRINE BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited)

(in millions)	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
	Shares	\$				
Balances at March 31, 2023	97.5	\$ 0.1	\$ 2,170.5	\$ (2.7)	\$ (483.4)	\$ 1,684.5
Net income	—	—	—	—	95.5	95.5
Other comprehensive income, net of tax	—	—	—	1.6	—	1.6
Stock-based compensation expense	—	—	68.5	—	—	68.5
Issuances of common stock under stock plans	0.1	—	2.9	—	—	2.9
Balances at June 30, 2023	97.6	\$ 0.1	\$ 2,241.9	\$ (1.1)	\$ (387.9)	\$ 1,853.0
Balances at March 31, 2022	95.5	\$ 0.1	\$ 1,947.7	\$ (9.3)	\$ (547.4)	\$ 1,391.1
Net loss	—	—	—	—	(16.9)	(16.9)
Other comprehensive loss, net of tax	—	—	—	(2.9)	—	(2.9)
Stock-based compensation expense	—	—	49.5	—	—	49.5
Issuances of common stock under stock plans	0.1	—	2.6	—	—	2.6
Balances at June 30, 2022	95.6	\$ 0.1	\$ 1,999.8	\$ (12.2)	\$ (564.3)	\$ 1,423.4
Balance at December 31, 2022	96.5	\$ 0.1	\$ 2,122.4	\$ (7.9)	\$ (406.8)	\$ 1,707.8
Net income	—	—	—	—	18.9	18.9
Other comprehensive income, net of tax	—	—	—	6.8	—	6.8
Stock-based compensation expense	—	—	108.4	—	—	108.4
Issuances of common stock under stock plans	1.1	—	11.1	—	—	11.1
Balance at June 30, 2023	97.6	\$ 0.1	\$ 2,241.9	\$ (1.1)	\$ (387.9)	\$ 1,853.0
Balance at December 31, 2021	94.9	\$ 0.1	\$ 2,011.4	\$ (1.7)	\$ (635.8)	\$ 1,374.0
Net loss	—	—	—	—	(3.0)	(3.0)
Other comprehensive loss, net of tax	—	—	—	(10.5)	—	(10.5)
Cumulative-effect adjustment due to adoption of ASU 2020-06	—	—	(106.8)	—	74.5	(32.3)
Stock-based compensation expense	—	—	86.5	—	—	86.5
Issuances of common stock under stock plans	0.7	—	8.7	—	—	8.7
Balance at June 30, 2022	95.6	\$ 0.1	\$ 1,999.8	\$ (12.2)	\$ (564.3)	\$ 1,423.4

See accompanying notes to the condensed consolidated financial statements.

NEUROCRINE BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

<i>(in millions)</i>	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities:		
Net income (loss)	\$ 18.9	\$ (3.0)
Adjustments to reconcile net income (loss) to net cash from operating activities:		
Stock-based compensation expense	108.4	86.5
Depreciation	8.3	7.2
Amortization of debt issuance costs	0.4	0.8
Amortization of intangible assets	1.8	—
Changes in fair value of equity security investments	(39.5)	(12.5)
Deferred income taxes	(73.1)	(3.4)
Loss on extinguishment of convertible senior notes	—	70.0
Other	(6.7)	2.3
Change in operating assets and liabilities:		
Accounts receivable	(37.5)	(93.5)
Inventories	3.4	1.2
Accounts payable and accrued liabilities	22.9	44.2
Other assets and liabilities, net	47.1	(2.2)
Cash flows from operating activities	54.4	97.6
Cash flows from investing activities:		
Purchases of debt securities available-for-sale	(530.0)	(253.7)
Sales and maturities of debt securities available-for-sale	408.6	277.6
Purchases of equity security investments	(31.3)	(7.7)
Capital expenditures	(15.3)	(16.4)
Cash flows from investing activities	(168.0)	(0.2)
Cash flows from financing activities:		
Issuances of common stock under benefit plans	11.1	8.7
Repurchase of convertible senior notes	—	(279.0)
Cash flows from financing activities	11.1	(270.3)
Change in cash, cash equivalents and restricted cash	(102.5)	(172.9)
Cash, cash equivalents and restricted cash at beginning of period	270.7	344.0
Cash, cash equivalents and restricted cash at end of period	\$ 168.2	\$ 171.1
Supplemental disclosures:		
Non-cash capital expenditures	\$ 0.8	\$ 0.9
Right-of-use assets acquired through operating leases	\$ 1.8	\$ —
Cash paid for interest	\$ 1.9	\$ 4.6
Cash paid for income taxes	\$ 3.4	\$ 3.1

See accompanying notes to the condensed consolidated financial statements.

NEUROCRINE BIOSCIENCES, INC.
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. Organization and Significant Accounting Policies

Basis of Presentation. The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP, for interim financial information and with the instructions of the Securities and Exchange Commission, or SEC, on Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and disclosures required by GAAP for complete financial statements. In the opinion of management, the condensed consolidated financial statements include all adjustments necessary, which are of a normal and recurring nature, for the fair presentation of our financial position and of the results of operations and cash flows for the periods presented. The accompanying unaudited condensed consolidated financial statements include the accounts of Neurocrine Biosciences and our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

These financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto for the year ended December 31, 2022, included in our Annual Report on Form 10-K, or the 2022 Form 10-K, filed with the SEC. The results of operations for the interim period shown in this report are not necessarily indicative of the results that may be expected for any other interim period or the full year. The condensed consolidated balance sheet as of December 31, 2022, has been derived from the audited financial statements as of that date, but does not include all of the information and footnotes required by GAAP for complete financial statements.

There were no significant changes to our significant accounting policies as disclosed in the 2022 Form 10-K, except as set forth below.

Strategic investments. We account for certain equity investments subject to the equity method of accounting, or through which we have the ability to exercise significant influence (but not control) over the operating and financial policies of an investee, under the fair value option. In assessing whether we exercise significant influence, we consider the nature and magnitude of such an investment, the voting and protective rights we hold, any participation in the governance of the investee and other relevant factors, such as the presence of a collaborative or other business relationship. Such investments are currently classified within Level 1 of the fair value hierarchy and carried at fair value, with any changes in the fair value of such investments recognized in earnings.

Recently Adopted Accounting Pronouncements.

ASU 2022-03. In June 2022, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2022-03, Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions, which clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The ASU also clarifies that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction and introduces certain disclosure requirements for equity securities subject to such restrictions. The amendments in ASU 2022-03 should be applied prospectively with any adjustments from the adoption of the amendments recognized in earnings and disclosed on the date of adoption. We adopted ASU 2022-03 on January 1, 2023 with no significant impact on our condensed consolidated financial statements.

2. Collaboration and License Agreements

Heptares Therapeutics Limited, or Heptares. We entered into a collaboration and license agreement with Heptares, which became effective in December 2021, to develop and commercialize certain compounds containing sub-type selective muscarinic M1, M4, or dual M1/M4 receptor agonists, for which we have the exclusive rights to develop, manufacture and commercialize worldwide, excluding in Japan, where Heptares retains the rights to develop, manufacture, and commercialize all compounds comprised of M1 receptor agonists, subject to certain exceptions. With respect to such rights retained by Heptares, we retain the rights to opt in to profit sharing arrangements, pursuant to which we and Heptares will equally share in the operating profits and losses for such compounds in Japan. Subject to specified conditions, we may elect to exercise such opt-in rights with respect to each such compound either before initiation of the first proof of concept Phase II clinical trial for such compound or following our receipt from Heptares of the top-line data from such clinical trial for such compound. We are responsible for all development, manufacturing and commercialization costs of any collaboration product.

In connection with the agreement, we paid Heptares \$100.0 million upfront, which, including certain transaction-related costs, was expensed as in-process research and development, or IPR&D, in 2021. We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business.

In connection with the United States Food and Drug Administration's, or FDA's, acceptance of our investigational new drug application for NBI-1117568 for the treatment of schizophrenia in June 2022, we paid Heptares a milestone of \$30.0 million, which was expensed as research and development, or R&D, in the second quarter of 2022.

Under the terms of the agreement, Heptares may be entitled to receive potential future payments of up to \$2.6 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any collaboration product.

Unless earlier terminated, the agreement will continue on a licensed product-by-licensed product and country-by-country basis until the date on which the royalty term for such licensed product has expired in such country. On a licensed product-by-licensed product and country-by-country basis, royalty payments would commence on the first commercial sale of a licensed product and terminate on the later of (i) the expiration of the last patent covering such licensed product in such country, (ii) a number of years from the first commercial sale of such licensed product in such country and (iii) the expiration of regulatory exclusivity for such licensed product in such country.

We may terminate the agreement in its entirety or with respect to one or more targets upon 180 days' written notice to Heptares during the research collaboration term and upon 90 days' written notice to Heptares following the expiration of the research collaboration term. Following the expiration of the research collaboration term, Heptares may terminate the agreement on a target-by-target basis in the event that we do not conduct any material development activities outside of Japan with respect to a certain compound or licensed product within the applicable target class for a continuous period of not less than 365 days and do not commence any such activities within 120 days of receiving written notice. Either party may terminate the agreement, subject to specified conditions, (i) in the event of material breach by the other party, subject to a cure period, (ii) if the other party challenges the validity or enforceability of certain intellectual property rights, subject to a cure period, or (iii) if the other party becomes insolvent or takes certain actions related to insolvency.

Takeda Pharmaceutical Company Limited, or Takeda. In 2020, we entered into an exclusive license agreement with Takeda, pursuant to which we acquired the exclusive rights to develop and commercialize certain early to mid-stage psychiatry compounds, including luvadaxistat, NBI-1065845, NBI-1065846 and four non-clinical stage compounds. Luvadaxistat and the four non-clinical stage compounds have each been designated as a royalty-bearing product. NBI-1065845 and NBI-1065846 are currently each designated as a profit-share product. We are responsible for all manufacturing, development and commercialization costs of any royalty-bearing product. With respect to NBI-1065845 and NBI-1065846, we and Takeda will equally share in the operating profits and losses. Takeda retains the rights to opt-out of the profit-sharing arrangements, pursuant to which Takeda would be entitled to receive potential future payments upon the achievement of certain event-based milestones with respect to such compounds and receive royalties on the future net sales of such compounds (in lieu of equally sharing in the operating profits and losses). Takeda may elect to exercise such opt-out right for such compound immediately following the completion of a second Phase II clinical trial for such compound, or, under certain circumstances related to the development and commercialization activities to be performed by us, before the initiation of a Phase III clinical trial for such compound.

In connection with the agreement, we paid Takeda \$120.0 million upfront, which, including certain transaction-related costs, was expensed as IPR&D in 2020. We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business.

In connection with the approval of our clinical trial application for NBI-1070770 for the treatment of major depressive disorder in July 2022, we paid Takeda a milestone of \$5.0 million, which was expensed as R&D in the third quarter of 2022.

Under the terms of the agreement, Takeda may be entitled to receive potential future payments of up to \$1.9 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any royalty-bearing product.

Unless earlier terminated, the agreement will continue on a licensed product-by-licensed product and country-by-country basis until the date on which, (i) for any royalty-bearing product, the royalty term has expired in such country; and (ii) for any profit-share product, for so long as we continue to develop, manufacture, or commercialize such licensed product. On a licensed product-by-licensed product and country-by-country basis, royalty payments would commence on the first commercial sale of a royalty-bearing product and terminate on the later of (i) the expiration of the last patent covering such royalty-bearing product in such country, (ii) a number of years from the first commercial sale of such royalty-bearing product in such country and (iii) the expiration of regulatory exclusivity for such royalty-bearing product in such country.

We may terminate the agreement in its entirety or in one or more (but not all) of the United States, Japan, the European Union and the United Kingdom, or, collectively, the major markets, upon six months' written notice to Takeda (i) with respect to all licensed products prior to the first commercial sale of the first licensed product for which first commercial sale occurs, or (ii) with respect to all licensed products in one or more given target classes, as defined in the agreement, prior to the first commercial sale of the first licensed product in such target class for which first commercial sale occurs. We may terminate the agreement in its entirety or in one or more (but not all) of the major markets upon 12 months' written notice to Takeda (i) with respect to all licensed products following the first commercial sale of the first licensed product for which first commercial sale occurs, or (ii) with respect to all licensed products in one or more given target classes following the first commercial sale of the first licensed product in such target class for which first commercial sale occurs. Takeda may terminate the agreement, subject to specified conditions, (i) if we challenge the validity or enforceability of certain Takeda intellectual property rights or (ii) on a target class-by-target class basis, in the event that we do not conduct any material development or commercialization activities with respect to any licensed product within such target class for a specified continuous period. Subject to a cure period, either party may terminate the agreement in the event of any material breach, solely with respect to the target class of a licensed product to which such material breach relates, or in its entirety in the event of any material breach that relates to all licensed products.

Idorsia Pharmaceuticals Ltd., or Idorsia. In 2020, we entered into a collaboration and license agreement with Idorsia, pursuant to which we acquired the global rights to NBI-827104, a potent, selective, orally active and brain penetrating T-type calcium channel blocker in clinical development for the treatment of a rare pediatric epilepsy and other potential indications, including essential tremor. We are responsible for all manufacturing, development and commercialization costs of any collaboration product.

In connection with the agreement, we paid Idorsia \$45.0 million upfront, which was expensed as IPR&D in 2020. We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business. Under the terms of the agreement, Idorsia may be entitled to receive potential future payments of up to \$1.7 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any collaboration product.

We may terminate the agreement, in its entirety or with respect to a particular compound or development candidate, upon 90 days' written notice to Idorsia. Further, in the event a party commits a material breach and fails to cure such material breach within 90 days after receiving written notice thereof, the non-breaching party may terminate the agreement in its entirety immediately upon written notice to the breaching party.

Xenon Pharmaceuticals Inc., or Xenon. In 2019, we entered into a collaboration and license agreement with Xenon to identify, research and develop sodium channel inhibitors, including NBI-921352 and three preclinical candidates, which compounds we have the exclusive rights to develop and commercialize. We are responsible for all development and manufacturing costs of any collaboration product, subject to certain exceptions.

In connection with the agreement, we paid Xenon \$50.0 million upfront, including a purchase of approximately 1.4 million shares of Xenon common stock (at \$14.196 per share). We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business. The purchased shares were recorded at a fair value of \$14.1 million after considering Xenon's stock price on the measurement date and certain transfer restrictions applicable to the shares. The remaining \$36.2 million of the purchase price, which includes certain transaction-related costs, was expensed as IPR&D in 2019.

In connection with the European Union's approval of our clinical trial application for NBI-921352 for the treatment of focal onset seizures in adults in September 2021, we paid Xenon a regulatory milestone of \$10.0 million, including a purchase of approximately 0.3 million shares of Xenon common stock (at \$19.9755 per share). The purchased shares were recorded at a fair value of \$4.6 million after considering Xenon's stock price on the measurement date and certain transfer restrictions that were applicable to the shares. The remaining \$5.4 million of the milestone payment was expensed as R&D in 2021.

In connection with the FDA's acceptance of our amended KAYAKTM study protocol in January 2022, we paid Xenon a regulatory milestone of \$15.0 million, including a purchase of approximately 0.3 million shares of Xenon common stock (at \$31.855 per share). The purchased shares were recorded at a fair value of \$7.7 million after considering Xenon's stock price on the measurement date. The remaining \$7.3 million of the milestone payment was expensed as R&D in the first quarter of 2022.

Under the terms of the agreement, Xenon may be entitled to receive potential future payments of up to \$1.7 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any collaboration product. Xenon retains the right to elect to co-develop one product in a major indication, pursuant to which Xenon would receive a mid-single digit percentage increase in royalties earned on the future net sales of such product in the United States and we and Xenon would equally share in the development costs of such product in the applicable indication, except where such development costs relate solely to the regulatory approval of such product outside the United States.

Unless earlier terminated, the agreement will continue on a licensed product-by-licensed product and country-by-country basis until the expiration of the royalty term for such product in such country. Upon the expiration of the royalty term for a particular licensed product and country, the license obtained by us with respect to such product and country will become fully paid, royalty free, perpetual and irrevocable. We may terminate the agreement upon 90 days' written notice to Xenon, provided that such unilateral termination will not be effective for certain products until we have used commercially reasonable efforts to complete certain specified clinical studies. Either party may terminate the agreement in the event of a material breach in whole or in part, subject to specified conditions.

Voyager Therapeutics, Inc., or Voyager.

2019 Voyager Agreement. In 2019, we entered into a collaboration and license agreement with Voyager, or the 2019 Voyager Agreement, pursuant to which we retain certain rights to develop and commercialize the Friedreich's ataxia program and two undisclosed programs. We are responsible for all development and commercialization costs of any collaboration product under the 2019 Voyager Agreement, subject to certain co-development and co-commercialization rights retained by Voyager.

In connection with the 2019 Voyager Agreement, we paid Voyager \$165.0 million upfront, including a purchase of approximately 4.2 million shares of Voyager common stock (at \$11.9625 per share), or the 2019 Purchased Shares, which are subject to certain transfer, beneficial ownership, and voting restrictions for a period of up to three years from the effective date of the 2023 Voyager Agreement (defined below). We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business. The 2019 Purchased Shares were recorded at a fair value of \$54.7 million after considering Voyager's stock price and certain transfer restrictions that were applicable to the shares on the measurement date. The remaining \$113.1 million of the purchase price, which includes certain transaction-related costs, was expensed as IPR&D in 2019. In addition, we paid Voyager \$5.0 million upfront, which was expensed as IPR&D in 2019, to acquire the rights outside the United States to the Friedreich's ataxia program.

Under the terms of the 2019 Voyager Agreement, Voyager may be entitled to receive potential future payments of up to \$1.3 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any collaboration product, subject to certain co-development and co-commercialization rights retained by Voyager.

Unless terminated earlier, the 2019 Voyager Agreement will continue in effect until the expiration of the last to expire royalty term with respect to any collaboration product under the agreement or the last expiration or termination of any exercised co-development and co-commercialization rights by Voyager as provided for in the 2019 Voyager Agreement. We may terminate the 2019 Voyager Agreement upon 180 days' written notice to Voyager prior to the first commercial sale of any collaboration product under the 2019 Voyager Agreement or upon one year after the date of notice if such notice is provided after the first commercial sale of any collaboration product under the 2019 Voyager Agreement.

2023 Voyager Agreement. In the first quarter of 2023, we entered into a collaboration and license agreement with Voyager, or the 2023 Voyager Agreement, pursuant to which we acquired the global rights to the gene therapy products directed to the gene that encodes glucosylceramidase beta 1, or GBA1, for the treatment of Parkinson's disease and other diseases associated with GBA1, or the GBA1 Program, and three gene therapy programs directed to rare central nervous system, or CNS, targets, each enabled by Voyager's next-generation TRACER™ capsids. With respect to collaboration products subject to the GBA1 Program, we are responsible for all development and commercialization costs of any such products, including in the United States, where Voyager retains certain co-development and co-commercialization rights. Voyager may elect to exercise such rights, pursuant to which we and Voyager would equally share in the operating profits and losses of such products in the United States (in lieu of Voyager being entitled to receive potential future payments of certain event-based milestones upon their achievement in the United States and receive royalties on the future net sales of such products in the United States), following Voyager's receipt of the top-line data from a first Phase I clinical trial for each such product. Irrespective of Voyager's election to exercise such rights, Voyager may be entitled to receive potential future payments upon the achievement of certain event-based milestones outside the United States and would be entitled to receive royalties on the future net sales of any such product outside the United States. With respect to collaboration products subject to the three gene therapy programs directed to rare CNS targets, we are responsible for all development and commercialization costs for any such products.

In connection with the 2023 Voyager Agreement, we paid Voyager \$175.0 million upfront, including a purchase of approximately 4.4 million shares of Voyager common stock (at \$8.88 per share), or the 2023 Purchased Shares, which are subject to certain transfer, beneficial ownership, and voting restrictions for a period of up to three years from the effective date of the 2023 Voyager Agreement. In addition, as part of the collaboration, Jude Onyia, Ph.D., Chief Scientific Officer of Neurocrine, was appointed to Voyager's board of directors with an initial term expiring in 2024. Mr. Onyia (or another individual designated by us) will be nominated for election to Voyager's board of directors annually for a maximum duration of 10 years from the effective date of the 2023 Voyager Agreement. We accounted for the transaction as an asset acquisition as the set of acquired assets did not constitute a business. Our strategic investment in Voyager became subject to the equity method of accounting following our purchase of the 2023 Purchased Shares, after which, together with the 2019 Purchased Shares, we owned approximately 19.9% of the voting stock of Voyager. We elected the fair value option to account for our strategic investment in Voyager as we believe it creates greater transparency regarding the investment's fair value at future reporting dates. The 2023 Purchased Shares were recorded at a fair value of \$31.3 million after considering Voyager's stock price on the measurement date. The remaining \$143.9 million of the purchase price, which includes certain transaction-related costs, was expensed as IPR&D in the first quarter of 2023 as the license had no foreseeable alternative future use. We recognized unrealized gains of \$32.1 million and \$41.3 million, respectively, on our strategic investment in Voyager for the second quarter and first six months of 2023. As of June 30, 2023, the fair value (Level 1) of our strategic investment in Voyager was \$98.2 million.

Under the terms of the 2023 Voyager Agreement, Voyager may be entitled to receive potential future payments of up to \$6.1 billion upon the achievement of certain event-based milestones and would be entitled to receive royalties on the future net sales of any collaboration product, subject to certain co-development and co-commercialization rights retained by Voyager.

Unless terminated earlier, the 2023 Voyager Agreement will continue in effect until the expiration of the last to expire royalty term with respect to any collaboration product under the 2023 Voyager Agreement or the last expiration or termination of any exercised co-development and co-commercialization rights by Voyager as provided for in the 2023 Voyager Agreement. We may terminate the 2023 Voyager Agreement upon 180 days' written notice to Voyager prior to the first commercial sale of any collaboration product under the 2023 Voyager Agreement or upon one year after the date of notice if such notice is provided after the first commercial sale of any collaboration product under the 2023 Voyager Agreement.

BIAL – Portela & Ca, S.A., or BIAL. In 2017, we received from BIAL a license to commercialize and market ONGENTYS® (opicapone) in the United States and Canada. We launched ONGENTYS in the United States in September 2020 as an FDA-approved add-on treatment to levodopa/carbidopa in patients with Parkinson's disease experiencing motor fluctuations.

In the first quarter of 2023, we provided BIAL with written notice of termination of the license agreement to commercialize and market ONGENTYS in the United States and Canada. The termination is anticipated to be effective in December 2023.

Mitsubishi Tanabe Pharma Corporation, or MTPC. We out-licensed the rights to valbenazine in Japan and other select Asian markets to MTPC in 2015. In December 2020, we entered into a commercial supply agreement with MTPC, pursuant to which we supply MTPC with valbenazine drug product for commercial use in such markets. MTPC is responsible for all development, manufacturing and commercialization costs of valbenazine in such markets.

In June 2022, MTPC launched DYSVAL® (valbenazine) in Japan for the treatment of tardive dyskinesia. In connection with MTPC's first commercial sale of DYSVAL in Japan, we recognized milestone revenue of \$20.0 million in the second quarter of 2022. In addition, we receive royalties at tiered percentage rates on MTPC net sales of DYSVAL.

Under the terms of our license agreement with MTPC, we may be entitled to receive potential future payments of up to \$30.0 million upon the achievement of certain sales-based milestones and are entitled to receive royalties at tiered percentage rates on future MTPC net sales of valbenazine for the longer of 10 years or the life of the related patent rights. MTPC may terminate the agreement upon 180 days' written notice to us. In such event, all out-licensed product rights would revert to us.

AbbVie Inc., or AbbVie. We out-licensed the global rights to elagolix to AbbVie in 2010. AbbVie is responsible for all development and commercialization costs of elagolix.

In August 2018, AbbVie launched ORLISSA® (elagolix tablets) in the United States for the treatment of moderate to severe pain associated with endometriosis. In June 2020, AbbVie launched ORIAHNN® (elagolix, estradiol and norethindrone acetate capsules and elagolix capsules) in the United States for the treatment of heavy menstrual bleeding related to uterine fibroids in premenopausal women. We receive royalties at tiered percentage rates on AbbVie net sales of elagolix and recognized elagolix royalty revenue of \$4.2 million and \$5.2 million, respectively, for the second quarter of 2023 and 2022 and \$7.9 million and \$9.4 million, respectively, for the first six months of 2023 and 2022.

Under the terms of our license agreement with AbbVie, we may be entitled to receive potential future payments of up to \$366.0 million upon the achievement of certain event-based milestones and are entitled to receive royalties at tiered percentage rates on future AbbVie net sales of elagolix for the longer of 10 years or the life of the related patent rights. AbbVie may terminate the agreement upon 180 days' written notice to us. In such event, all out-licensed product rights would revert to us.

3. Debt Securities

The following table presents the amortized cost, unrealized gain and loss recognized in accumulated other comprehensive income (loss) and fair value of debt securities available-for-sale, aggregated by major security type and contractual maturity.

(in millions)	Contractual Maturity	June 30, 2023				December 31, 2022			
		Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
Commercial paper	0 to 1 years	\$ 223.7	\$ —	\$ —	\$ 223.7	\$ 156.2	\$ —	\$ (0.2)	\$ 156.0
Corporate debt securities	0 to 1 years	263.7	—	(2.4)	261.3	296.2	—	(3.2)	293.0
Securities of government-sponsored entities	0 to 1 years	333.7	—	(2.2)	331.5	283.4	—	(6.0)	277.4
		<u>\$ 821.1</u>	<u>\$ —</u>	<u>\$ (4.6)</u>	<u>\$ 816.5</u>	<u>\$ 735.8</u>	<u>\$ —</u>	<u>\$ (9.4)</u>	<u>\$ 726.4</u>
Corporate debt securities	1 to 3 years	\$ 268.5	\$ 0.1	\$ (2.9)	\$ 265.7	\$ 259.5	\$ 0.2	\$ (4.3)	\$ 255.4
Securities of government-sponsored entities	1 to 3 years	78.1	—	(1.2)	76.9	45.0	—	(1.0)	44.0
		<u>\$ 346.6</u>	<u>\$ 0.1</u>	<u>\$ (4.1)</u>	<u>\$ 342.6</u>	<u>\$ 304.5</u>	<u>\$ 0.2</u>	<u>\$ (5.3)</u>	<u>\$ 299.4</u>

Unrealized losses on our available-for-sale debt security investments were primarily due to changes in interest rates. These investments are of high credit quality, and we do not intend to sell these investments and it is not more likely than not that we will be required to sell these investments before recovery of their amortized cost basis. No allowance for credit losses was recognized as of June 30, 2023 or December 31, 2022.

The following table presents debt securities available-for-sale that were in an unrealized loss position as of June 30, 2023, aggregated by major security type and length of time in a continuous loss position.

(in millions)	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	\$ 248.0	\$ (2.4)	\$ 225.8	\$ (2.9)	\$ 473.8	\$ (5.3)
Securities of government-sponsored entities	\$ 262.8	\$ (2.3)	\$ 76.3	\$ (1.1)	\$ 339.1	\$ (3.4)

The following table presents debt securities available-for-sale that were in an unrealized loss position as of December 31, 2022, aggregated by major security type and length of time in a continuous loss position.

(in millions)	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Commercial paper	\$ 32.1	\$ (0.2)	\$ —	\$ —	\$ 32.1	\$ (0.2)
Corporate debt securities	\$ 199.5	\$ (1.9)	\$ 299.1	\$ (5.6)	\$ 498.6	\$ (7.5)
Securities of government-sponsored entities	\$ 107.7	\$ (2.5)	\$ 198.4	\$ (4.5)	\$ 306.1	\$ (7.0)

Accrued interest receivables on debt securities available-for-sale totaled \$5.6 million and \$4.7 million, respectively, as of June 30, 2023 and December 31, 2022. We do not measure an allowance for credit losses for accrued interest receivables. For the purposes of identifying and measuring an impairment, accrued interest is excluded from both the fair value and amortized cost basis of the debt security. Uncollectible accrued interest receivables associated with an impaired debt security are reversed against interest income upon identification of the impairment. No accrued interest receivables were written off during the first six months of 2023 or 2022.

4. Fair Value Measurements

The fair value hierarchy consists of the following three levels:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 – Quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 – Unobservable inputs that reflect our own assumptions about the assumptions that market participants would use in pricing the asset or liability when there is little, if any, market activity for the asset or liability at the measurement date.

The following table presents a summary of investments, which were measured at fair value on a recurring basis.

(in millions)	June 30, 2023				December 31, 2022			
	Fair Value	Leveling			Fair Value	Leveling		
		Level 1	Level 2	Level 3		Level 1	Level 2	Level 3
Cash and money market funds	\$ 160.2	\$ 160.2	\$ —	\$ —	\$ 262.9	\$ 262.9	\$ —	\$ —
Restricted cash	8.0	8.0	—	—	7.8	7.8	—	—
Commercial paper	223.7	—	223.7	—	156.0	—	156.0	—
Corporate debt securities	527.0	—	527.0	—	548.4	—	548.4	—
Securities of government-sponsored entities	408.4	—	408.4	—	321.4	—	321.4	—
Equity security investments	173.0	173.0	—	—	102.1	102.1	—	—
	<u>\$ 1,500.3</u>	<u>\$ 341.2</u>	<u>\$ 1,159.1</u>	<u>\$ —</u>	<u>\$ 1,398.6</u>	<u>\$ 372.8</u>	<u>\$ 1,025.8</u>	<u>\$ —</u>

5. Inventories, net

Inventories, net, consisted of the following:

(in millions)	June 30, 2023	December 31, 2022
Raw materials	\$ 10.4	\$ 12.0
Work in process	6.3	5.6
Finished goods	15.0	17.5
Total inventories, net	<u>\$ 31.7</u>	<u>\$ 35.1</u>

6. Goodwill and Intangible Assets

The following table presents the changes in the carrying amount of goodwill.

(in millions)	Amount
Balance as of December 31, 2022	\$ 5.4
Foreign currency translation adjustments	0.3
Balance as of June 30, 2023	<u>\$ 5.7</u>

The following table presents information relating to our recognized intangible assets as of June 30, 2023.

(dollars in millions)	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed product rights	10 years	\$ 35.7	\$ 2.3	\$ 33.4
Acquired IPR&D	Indefinite	\$ 3.5	—	3.5
Total intangible assets, net				<u>\$ 36.9</u>

The following table presents approximate non-cancelable future minimum lease payments under operating leases as of June 30, 2023.

<i>(in millions)</i>	Amount ⁽¹⁾
2023 (6 months remaining)	\$ 9.1
2024	18.5
2025	17.0
2026	15.7
2027	16.0
Thereafter	54.4
Total operating lease payments	130.7
Less accreted interest	23.9
Total operating lease liabilities	106.8
Less current operating lease liabilities included in other current liabilities	17.7
Noncurrent operating lease liabilities	\$ 89.1

(1) Amounts presented in the table above exclude \$17.2 million for 2024, \$33.3 million for 2025, \$41.9 million for 2026, \$43.2 million for 2027 and \$436.5 million thereafter of approximate non-cancelable future minimum lease payments under operating leases that have not yet commenced.

New Campus Facility. On February 8, 2022, we entered into a lease agreement for a new four-building campus facility in San Diego, California. This campus facility, comprised of office space and research and development laboratories, will serve as our new corporate headquarters upon completion of its construction. Under the terms of the lease, we also secured a six-year option for the construction of a fifth building and an option to purchase the entire campus in the future.

Under the terms of the lease, on a building-by-building basis, base rent will be subject to a 10-month rent abatement period following the respective lease commencement date. After the rent abatement period, monthly base rent will be \$6 per square foot, subject to annual escalations of 3% during the initial 13.6-year lease term, which term we have the option to renew for two additional terms of five years each.

The commencement of this lease for accounting purposes will be determined for each building based upon its readiness for occupancy. On a building-by-building basis, we will recognize a lease liability, corresponding right-of-use asset, and initiate lease expense recognition when this condition has been met.

9. Convertible Senior Notes

On May 2, 2017, we completed a private placement of \$517.5 million in aggregate principal amount of 2.25% fixed-rate convertible senior notes due May 15, 2024, or the 2024 Notes, and entered into the 2017 Indenture with respect to the 2024 Notes. Interest on the 2024 Notes is due semi-annually on May 15 and November 15 of each year.

In 2020, we repurchased \$136.2 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$186.9 million in cash, which resulted in the recognition of an \$18.4 million loss on extinguishment. In 2022, we repurchased \$210.8 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$279.0 million in cash, which resulted in the recognition of a \$70.0 million loss on extinguishment in the second quarter of 2022.

The following table presents a summary of the 2024 Notes as of June 30, 2023.

<i>(in millions)</i>	Principal Amount	Unamortized Issuance Costs	Net Carrying Amount	Fair Value	
				Amount	Leveling
2024 Notes	\$ 170.4	\$ (0.7)	\$ 169.7	\$ 215.7	Level 2

The following table presents a summary of the 2024 Notes as of December 31, 2022.

<i>(in millions)</i>	Principal Amount	Unamortized Issuance Costs	Net Carrying Amount	Fair Value	
				Amount	Leveling
2024 Notes	\$ 170.4	\$ (1.0)	\$ 169.4	\$ 268.0	Level 2

The following table presents a summary of the interest expense of the 2024 Notes.

<i>(in millions)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Coupon interest	\$ 1.1	\$ 1.8	\$ 2.0	\$ 4.0
Amortization of debt discount and issuance costs	0.2	0.4	0.4	0.8
Total interest expense	\$ 1.3	\$ 2.2	\$ 2.4	\$ 4.8

The initial conversion rate for the 2024 Notes, which is subject to adjustment in some events (as provided for in the 2017 Indenture), is 13.1711 shares of common stock per \$1,000 principal amount and equivalent to an initial conversion price of approximately \$75.92 per share, reflecting a conversion premium of approximately 42.5% above the closing price of \$53.28 per share of our common stock on April 26, 2017.

We may redeem for cash all or part of the 2024 Notes if the last reported sale price (as defined in the 2017 Indenture) of our common stock has been at least 130% of the conversion price then in effect (equal to \$98.70 as of June 30, 2023) for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading-day period ending on, and including, the trading day immediately before the date which we provide notice of redemption.

Holders of the 2024 Notes may convert the 2024 Notes at any time prior to the close of business on the business day immediately preceding May 15, 2024, only under the following circumstances:

- (i) during any calendar quarter (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than 130% of the conversion price (equal to \$98.70 as of June 30, 2023) on each applicable trading day;
- (ii) during the five business-day period immediately after any five consecutive trading-day period (the measurement period) in which the trading price (as defined in the 2017 Indenture) per \$1,000 principal amount of the 2024 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day;
- (iii) upon the occurrence of specified corporate events, including a merger or a sale of all or substantially all of our assets; or
- (iv) if we call the 2024 Notes for redemption, until the close of business on the business day immediately preceding the redemption date.

On or after January 15, 2024, until the close of business on the scheduled trading day immediately preceding May 15, 2024, holders of the 2024 Notes may convert the 2024 Notes at any time.

Upon conversion, holders will receive the principal amount of their 2024 Notes in cash and any conversion premium, calculated based on the per share volume-weighted average price for each of the 30 consecutive trading days during the observation period (as more fully described in the 2017 Indenture), in either cash or shares of our common stock.

If we undergo a fundamental change (as defined in the 2017 Indenture), subject to certain conditions, holders of the 2024 Notes may require us to repurchase for cash all or part of their 2024 Notes at a repurchase price equal to 100% of the principal amount of the 2024 Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, if a make-whole fundamental change (as defined in the 2017 Indenture) occurs prior to January 15, 2024, we would, in certain circumstances, increase the conversion rate for a holder who elects to convert their notes in connection with the make-whole fundamental change.

The 2024 Notes are our general unsecured obligations that rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the 2024 Notes, and equal in right of payment to our unsecured indebtedness. The 2024 Notes do not contain any financial or operating covenants or any restrictions on the payment of dividends, the issuance of other indebtedness or the issuance or repurchase of securities by us. The 2017 Indenture contains customary events of default with respect to the 2024 Notes, including that upon certain events of default, 100% of the principal and accrued and unpaid interest on the 2024 Notes will automatically become due and payable.

10. Earnings (Loss) per Share

Earnings (loss) per share was calculated as follows:

<i>(in millions, except per share data)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net income (loss) - basic and diluted	\$ 95.5	\$ (16.9)	\$ 18.9	\$ (3.0)
Weighted-average shares outstanding:				
Basic	97.6	95.6	97.4	95.4
Effect of dilutive securities:				
Stock options	1.6	—	1.7	—
Restricted stock	0.5	—	0.6	—
2024 Notes	0.5	—	0.6	—
Diluted	100.2	95.6	100.3	95.4
Earnings (loss) per share, basic	\$ 0.98	\$ (0.18)	\$ 0.19	\$ (0.03)
Earnings (loss) per share, diluted	\$ 0.95	\$ (0.18)	\$ 0.19	\$ (0.03)
Shares excluded from diluted per share amounts because their effect would have been anti-dilutive	6.7	12.5	5.6	12.2

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

The following Management’s Discussion and Analysis of Financial Condition and Results of Operations section contains forward-looking statements, which involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in Part II, Item 1A under the caption “Risk Factors.” The interim financial statements and this Management’s Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2022 and the related Management’s Discussion and Analysis of Financial Condition and Results of Operations, which are contained in our Annual Report on Form 10-K for the year ended December 31, 2022 and our Quarterly Report on Form 10-Q for the three months ended March 31, 2023.

Overview

Neurocrine Biosciences is a neuroscience-focused, biopharmaceutical company with a simple purpose: to relieve suffering for people with great needs, but few options. We are dedicated to discovering and developing life-changing treatments for patients with under-addressed neurological, neuroendocrine and neuropsychiatric disorders. The Company’s diverse portfolio includes United States Food and Drug Administration, or FDA, approved treatments for tardive dyskinesia, Parkinson’s disease, endometriosis* and uterine fibroids* and a diversified portfolio of advanced clinical-stage programs in multiple therapeutic areas. For three decades, we have applied our unique insight into neuroscience and the interconnections between brain and body systems to treat complex conditions and we will continue to relentlessly pursue medicines to ease the burden of debilitating diseases and disorders. (*in collaboration with AbbVie Inc., or AbbVie)

We launched INGREZZA® (valbenazine) in the United States in May 2017 as the first FDA-approved drug for the treatment of tardive dyskinesia. INGREZZA net product sales represent nearly all of our total net product sales.

Our partner Mitsubishi Tanabe Pharma Corporation, or MTPC, launched DYSVAL® (valbenazine) in Japan in June 2022 for the treatment of tardive dyskinesia. We receive royalties at tiered percentage rates on MTPC net sales of DYSVAL.

Our partner AbbVie launched ORILISSA® (elagolix tablets) in the United States in August 2018 for the treatment of moderate to severe pain associated with endometriosis and launched ORIAHNN® (elagolix, estradiol and norethindrone acetate capsules and elagolix capsules) in the United States in June 2020 for the treatment of heavy menstrual bleeding related to uterine fibroids in premenopausal women. We receive royalties at tiered percentage rates on AbbVie net sales of elagolix.

Results of Operations for the Three and Six Months Ended June 30, 2023 and 2022

Revenues

Net Product Sales by Sales Product.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
INGREZZA	\$ 439.7	\$ 349.6	\$ 850.1	\$ 652.2
Other	6.6	2.4	11.5	4.8
Total net product sales	\$ 446.3	\$ 352.0	\$ 861.6	\$ 657.0

Compared with the comparable periods last year, the increase in total net product sales primarily reflected increased INGREZZA net product sales driven by total prescriptions on higher customer demand and increased commercial activities.

Collaboration Revenues by Category.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Royalty revenue	\$ 4.9	\$ 5.2	\$ 9.0	\$ 9.4
Milestone revenue	—	20.0	—	20.0
Other	1.5	1.0	2.5	2.4
Total collaboration revenues	\$ 6.4	\$ 26.2	\$ 11.5	\$ 31.8

Collaboration revenues primarily consist of royalties earned at tiered percentage rates on AbbVie net sales of elagolix and, beginning in June 2022, MTPC net sales of DYSVAL. Milestone revenue for the first six months of 2022 reflected the achievement of a \$20.0 million milestone in connection with MTPC's first commercial sale of DYSVAL in Japan in June 2022.

Operating Expenses

Cost of Revenues.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Cost of revenues	\$ 11.5	\$ 4.8	\$ 20.0	\$ 9.4

Compared with the comparable periods last year, the increase in cost of revenues primarily reflected increased amortization costs related to our acquired intangible assets, an increase in our reserves for obsolescence, increased INGREZZA and other net product sales, and increased manufacturing costs in connection with our supply of valbenazine drug product under our collaboration with MTPC.

Research and Development by Category.

We support our drug discovery and development efforts through the commitment of significant resources to discovery, research and development programs, and business development opportunities. Costs are reflected in the applicable development stage based upon the program status when incurred. Therefore, the same program could be reflected in different development stages in the same reporting period. For several of our programs, the research and development activities are part of our collaborative arrangements.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Late stage	\$ 27.9	\$ 15.7	\$ 58.0	\$ 30.1
Early stage	23.6	21.7	52.5	38.3
Research and discovery	25.7	15.8	46.5	31.7
Milestone	—	30.4	—	37.7
Payroll and benefits	57.4	40.8	105.2	78.1
Facilities and other	11.2	11.5	23.1	22.2
Total research and development	\$ 145.8	\$ 135.9	\$ 285.3	\$ 238.1

Late Stage. Consists of expenses incurred for product candidates in Phase II registrational studies and all subsequent activities.

Compared with the comparable periods last year, late-stage expenses primarily reflected increased investment in our Phase III programs in CAH.

Early Stage. Consists of expenses incurred for product candidates after the approval of an investigational new drug application by the applicable regulatory agency through Phase II non-registrational studies.

Compared with the comparable periods last year, early-stage expenses primarily reflected increased investment in our Phase II program for NBI-1117568 in schizophrenia and our advancing Phase II programs in psychiatry.

Research and Discovery. Consists of expenses incurred prior to the approval of an investigational new drug application by the applicable regulatory agency.

Compared with the comparable periods last year, research and discovery expenses primarily reflected increased investment in our preclinical development programs, including our gene therapy, muscarinic, and VMAT2 programs.

Milestone. Consists of milestone expenses incurred in connection with our collaborative arrangements.

Milestone expenses for the first six months of 2022 primarily reflected \$30.0 million of expense recognized in connection with the FDA's acceptance of our investigational new drug application for NBI-1117568 for the treatment of schizophrenia in June 2022 and \$7.3 million of expense recognized in connection with the FDA's acceptance of our amended KAYAK™ study protocol in January 2022.

Payroll and Benefits. Consists of costs incurred for salaries and wages, payroll taxes, benefits and stock-based compensation associated with employees involved in research and development activities. Stock-based compensation may fluctuate from period to period based on factors that are not within our control, such as our stock price on the dates stock-based grants are issued.

Compared to the comparable periods last year, payroll and benefits expenses for the second quarter and first six months of 2023 primarily reflected higher headcount and increases of \$7.6 million and \$8.9 million, respectively, in non-cash stock-based compensation expense primarily driven by a charge related to a change in equity grant agreement terms.

Acquired In-Process Research and Development, or IPR&D.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Acquired in-process research and development	\$ —	\$ —	\$ 143.9	\$ —

In the first quarter of 2023, we recognized \$143.9 million of IPR&D expense in connection with our payment of the upfront fee pursuant to our expanded strategic partnership with Voyager.

Selling, General and Administrative, or SG&A.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Selling, general and administrative	\$ 221.8	\$ 182.8	\$ 464.5	\$ 383.5

Compared with the comparable periods last year, SG&A expenses for the second quarter and first six months of 2023 primarily reflected continued investment in our commercial initiatives, including our branded direct-to-consumer INGREZZA advertising campaign and deployment of our expanded salesforce in April 2022, and increased payroll and benefits expenses on higher headcount and increases of \$11.4 million and \$13.0 million, respectively, in non-cash stock-based compensation expense primarily driven by a charge related to a change in equity grant agreement terms.

Other Income (Expense), Net.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Interest expense	\$ (1.3)	\$ (2.2)	\$ (2.4)	\$ (4.8)
Unrealized gain (loss) on equity security investments	37.3	(7.4)	39.5	12.5
Loss on extinguishment of convertible senior notes	—	(70.0)	—	(70.0)
Investment income and other, net	12.0	1.6	21.8	2.6
Total other income (expense), net	\$ 48.0	\$ (78.0)	\$ 58.9	\$ (59.7)

Compared with the comparable period last year, the change in other income (expense), net, for first six months of 2023 primarily reflected an increase in the fair value of our equity investment in Voyager, increased interest income on our debt security investments and decreased debt extinguishment charges in connection with the repurchase of our convertible senior notes in the second quarter of 2022.

Provision for (Benefit from) Income Taxes.

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Provision for (benefit from) income taxes	\$ 26.1	\$ (6.4)	\$ (0.6)	\$ 1.1

The effective tax rate for the second quarter and first six months of 2023 varied from the federal and state statutory rates primarily due to credits generated for research activities, certain nondeductible expenses, the impact of changes in the state effective rate, and losses incurred in foreign jurisdictions for which no tax benefit was recorded as management cannot conclude that it is more likely than not that the tax benefit of such losses will be realized in the future. For the comparable periods last year, the effective tax rate varied from the federal and state statutory rates primarily due to credits generated for research activities and certain nondeductible expenses, including the premium paid on the repurchase of our convertible senior notes in the second quarter of 2022.

Net Income (Loss).

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net income (loss)	\$ 95.5	\$ (16.9)	\$ 18.9	\$ (3.0)

Compared with the comparable period last year, the change in net income (loss) for first six months of 2023 primarily reflected increased INGREZZA net product sales, an increase in the fair value of our equity investment in Voyager, decreased debt extinguishment charges in connection with the repurchase of our convertible senior notes in the second quarter of 2022 and decreased milestone expenses in connection with our collaboration with Heptares, partially offset by increased upfront payments in connection with our expanded strategic partnership with Voyager in the first quarter of 2023 and continued investment in our commercial initiatives and expanded clinical portfolio.

Liquidity and Capital Resources

Sources of Liquidity

We believe that our existing capital resources, funds generated by anticipated INGREZZA net product sales and investment income will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, we cannot guarantee that our existing capital resources and anticipated revenues will be sufficient to conduct and complete all of our research and development programs or commercialization activities as planned. We may seek to access the public or private equity markets whenever conditions are favorable or pursue opportunities to obtain additional debt financing in the future. We may also seek additional funding through strategic alliances or other financing mechanisms. However, we cannot provide assurance that adequate funding will be available on terms acceptable to us, if at all.

Information Regarding Our Financial Condition.

(in millions)	June 30, 2023	December 31, 2022
Total cash, cash equivalents and marketable securities	\$ 1,319.3	\$ 1,288.7
Working Capital:		
Total current assets	\$ 1,496.6	\$ 1,453.5
Less total current liabilities	582.5	537.7
Total working capital	\$ 914.1	\$ 915.8

Information Regarding Our Cash Flows.

(in millions)	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities	\$ 54.4	\$ 97.6
Cash flows from investing activities	(168.0)	(0.2)
Cash flows from financing activities	11.1	(270.3)
Change in cash, cash equivalents and restricted cash	\$ (102.5)	\$ (172.9)

Cash Flows from Operating Activities. Compared with the comparable period last year, cash flows from operating activities primarily reflected increased INGREZZA net product sales and lower milestone payments in connection with our collaboration with Heptares, partially offset by higher upfront payments in connection with our expanded strategic partnership with Voyager and continued investment in our commercial initiatives and expanded clinical portfolio.

Cash Flows from Investing Activities. Periodic fluctuations in cash flows from investing activities primarily reflected timing differences related to our purchases, sales, and maturities of debt security investments and changes in our portfolio-mix.

Cash flows from investing activities for the periods presented also reflected equity investments of \$31.3 million in Voyager in the first quarter of 2023 and \$7.7 million in Xenon Pharmaceuticals, Inc. in the comparable period last year.

Cash Flows from Financing Activities. Cash flows from financing activities reflected proceeds from issuances of our common stock for all periods presented.

Cash flows from financing activities for the six months ended June 30, 2022 also reflected the repurchase of \$210.8 million aggregate principal amount of our convertible senior notes for an aggregate repurchase price of \$279.0 million in cash in the second quarter of 2022.

Material Cash Requirements

In the pharmaceutical industry, it can take a significant amount of time and capital resources to successfully complete all stages of research and development and commercialize a product candidate, which ultimate length of time and spend required cannot be accurately estimated as it varies substantially according to the type, complexity, novelty and intended use of a product candidate.

The funding necessary to execute our business strategies is subject to numerous uncertainties and we may be required to make substantial expenditures if unforeseen difficulties arise in certain areas of our business. In particular, our future capital requirements will depend on many factors, including:

- the commercial success of INGREZZA, ORLISSA, ORIAHNN and/or DYSVAL;
- continued scientific progress in our research and clinical development programs;
- the magnitude and complexity of our research and development programs;
- progress with preclinical testing and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the cost of commercialization activities and arrangements, including our advertising campaigns;
- the cost of manufacturing of our product candidates;
- the costs involved in filing and pursuing patent applications, enforcing patent claims, or engaging in interference proceedings or other patent litigation;
- competing technological and market developments; and
- developments related to any future litigation.

In addition to the foregoing factors, we have significant future capital requirements, including:

External Business Developments. In addition to our independent efforts to develop and market products, we may enter into collaboration and license agreements or acquire businesses from time-to-time to enhance our drug development and commercial capabilities. With respect to our existing collaboration and license agreements, we may be required to make potential future payments of up to \$16.9 billion upon the achievement of certain event-based milestones.

Refer to Note 2 to the condensed consolidated financial statements for more information on our significant collaboration and license agreements.

Leases. Our operating leases that have commenced have terms that expire beginning 2025 through 2031 and consist of office space and research and development laboratories, including our corporate headquarters.

On February 8, 2022, we entered into a lease agreement for a new four-building campus facility in San Diego, California. This campus facility, comprised of office space and research and development laboratories, will serve as our new corporate headquarters upon completion of its construction. Under the terms of the lease, we also secured a six-year option for the construction of a fifth building and an option to purchase the entire campus in the future.

Refer to Note 8 to the condensed consolidated financial statements for more information on our leases, including a presentation of our approximate future minimum lease payments under non-cancelable operating leases.

Convertible Senior Notes. On May 2, 2017, we completed a private placement of \$517.5 million in aggregate principal amount of 2.25% fixed-rated convertible senior notes due May 15, 2024, or the 2024 Notes. In 2020, we repurchased \$136.2 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$186.9 million in cash. In 2022, we repurchased \$210.8 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$279.0 million in cash. As of June 30, 2023, \$170.4 million aggregate principal amount of the 2024 Notes remained outstanding.

At our election, we may redeem all or any portion of the 2024 Notes under certain circumstances. With respect to the 2024 Notes, unless earlier converted, redeemed, or repurchased, we would be required to pay interest of \$1.9 million in 2023 and 2024 and pay the aggregate principal amount outstanding of \$170.4 million upon maturity of the 2024 Notes.

The 2024 Notes do not contain any financial or operating covenants or any restrictions on the payment of dividends, the issuance of other indebtedness or the issuance or repurchase of securities by us. There are customary events of default with respect to the 2024 Notes, including that upon certain events of default, 100% of the principal and accrued and unpaid interest on the 2024 Notes would become due and payable.

Refer to Note 9 to the condensed consolidated financial statements for more information on the 2024 Notes.

Critical Accounting Policies and Estimates

There were no changes to our critical accounting policies as disclosed in our Annual Report on Form 10-K for the year ended December 31, 2022.

Interest Rate Risk

We maintain a diversified investment portfolio consisting of low-risk, investment-grade debt securities with maturities of up to three years, including investments in commercial paper, securities of government-sponsored entities and corporate bonds that are subject to interest rate risk. The primary objective of our investment activities is to preserve principal and maintain liquidity. If a 1% unfavorable change in interest rates were to have occurred on June 30, 2023, it would not have had a material effect on the fair value of our investment portfolio as of that date.

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements that involve a number of risks and uncertainties. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, these forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as “believes,” “expects,” “hopes,” “may,” “will,” “plan,” “intends,” “estimates,” “could,” “should,” “would,” “continue,” “seeks,” “proforma,” or “anticipates,” or other similar words (including their use in the negative), or by discussions of future matters such as the development of new products, technology enhancements, possible changes in legislation and other statements that are not historical. These statements include but are not limited to statements under the captions “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” as well as other sections in this report. You should be aware that the occurrence of any of the events discussed under the heading in Part II titled “Item 1A. Risk Factors” and elsewhere in this report could substantially harm our business, results of operations and financial condition and that if any of these events occurs, the trading price of our common stock could decline and you could lose all or a part of the value of your shares of our common stock.

The cautionary statements made in this report are intended to be applicable to all related forward-looking statements wherever they may appear in this report. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. Except as required by law, we assume no obligation to update our forward-looking statements, even if new information becomes available in the future.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

A discussion of our exposure to, and management of, market risk appears in Part I, Item 2 of this Quarterly Report on Form 10-Q under the heading “Interest Rate Risk.”

Item 4. Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports required by the Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the timelines specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the quarter covered by this report. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

An evaluation was also performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of any changes to our internal control over financial reporting that occurred during our last fiscal quarter and that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Our evaluation did not identify significant changes in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) that occurred during the quarter ended June 30, 2023, 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

During 2021, 2022, and 2023, we received notices from (i) Teva Pharmaceuticals Development, Inc., (ii) Lupin Limited, (iii) Crystal Pharmaceutical (Suzhou) Co. Ltd., (iv) Sandoz Inc. and (v) Zydus Pharmaceuticals (USA) Inc. that each company had filed an abbreviated new drug application, or ANDA, with the FDA seeking approval of a generic version of INGREZZA. These companies represented that their respective ANDAs each contained a Paragraph IV Patent Certification alleging that certain of our patents covering INGREZZA are invalid and/or will not be infringed by the manufacture, use or sale of the medicine for which the ANDA was submitted.

We filed suit in the United States District Court for the District of Delaware during 2021, 2022 and 2023, against (i) Teva Pharmaceuticals, Inc., Teva Pharmaceuticals Development, Inc., Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. (entity dismissed), collectively, "Teva"; (ii) Lupin Limited, Lupin Pharmaceuticals, Inc., Lupin Inc. and Lupin Atlantis Holdings S.A., (iii) Crystal Pharmaceutical (Suzhou) Co., Ltd., Crystal Pharmatech Co., Ltd., (iv) Sandoz Inc., Sandoz International GmbH (entity dismissed) and Sandoz AG (entity dismissed) and (v) Zydus Pharmaceuticals (USA) Inc., Zydus Worldwide DMCC, Zydus Lifesciences Limited (formerly known as Cadila Healthcare Limited d/b/a Zydus Cadila) and Zydus Healthcare (USA) LLC (entity dismissed). Sandoz Inc. has been joined in the cases against Crystal Pharmaceutical (Suzhou) Co., Ltd. and Crystal Pharmatech Co., Ltd. The cases filed against Teva Pharmaceuticals, Inc., Teva Pharmaceuticals Development, Inc., Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. have been dismissed. The remaining cases have been consolidated in the United States District Court for the District of Delaware and the trial is currently scheduled for January 2, 2024.

We also filed suit in the United States District Court for the District of New Jersey during 2021, 2022 and 2023 against Zydus Pharmaceuticals (USA) Inc., Zydus Worldwide DMCC, Zydus Lifesciences Limited (formerly known as Cadila Healthcare Limited d/b/a Zydus Cadila) and Zydus Healthcare (USA) LLC and these cases were dismissed in favor of continued prosecution of the Delaware proceedings against the same entities.

From time to time, we may also become subject to other legal proceedings or claims arising in the ordinary course of our business. We currently believe that none of the claims or actions pending against us is likely to have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations. Given the unpredictability inherent in litigation, however, we cannot predict the outcome of these matters.

Item 1A. Risk Factors

The following information sets forth risk factors that could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report on Form 10-Q and those we may make from time to time. If any of the following risks actually occur, our business, operating results, prospects or financial condition could be harmed. Additional risks not presently known to us, or that we currently deem immaterial, may also affect our business operations. The risk factors set forth below with an asterisk (*) contain changes to the risk factors set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

Summary Risk Factors

We face risks and uncertainties related to our business, many of which are beyond our control. In particular, risks associated with our business include:

- We may not be able to continue to successfully commercialize INGREZZA or any of our other products, or any of our product candidates if they are approved in the future.
- If physicians and patients do not continue to accept INGREZZA or do not accept any of our other products, or our sales and marketing efforts are not effective, we may not generate sufficient revenue.
- Government and third-party payors may impose additional sales and pharmaceutical pricing controls on our products, further limit coverage and/or reimbursement for our products or make decisions that adversely impact the status of our products for government reimbursement that could negatively impact our product revenues and impact or delay sustained profitability.
- Our business could be adversely affected by the effects of health pandemics or epidemics, which could also cause significant disruption in the operations of third-party manufacturers, contract research organizations, or CROs, or other third parties upon whom we rely.
- We face intense competition, and if we are unable to compete effectively, the demand for our products may be reduced.

- Because the development of our product candidates is subject to a substantial degree of technological uncertainty, we may not succeed in developing any of our product candidates.
- Our clinical trials may be delayed for safety or other reasons, or fail to demonstrate the safety and efficacy of our product candidates, which could prevent or significantly delay their regulatory approval.
- Several of our planned clinical trial sites have been impacted and are no longer available as a result of the conflict between Russia and Ukraine.
- We depend on our current collaborators for the development and commercialization of several of our products and product candidates and may need to enter into future collaborations to develop and commercialize certain of our product candidates.
- Use of our approved products or those of our collaborators could be associated with side effects or adverse events.
- We have recently increased the size of our organization and will need to continue to increase the size of our organization. We may encounter difficulties with managing our growth, which could adversely affect our results of operations.
- If we are unable to retain and recruit qualified scientists and other employees or if any of our key senior executives discontinues his or her employment with us, it may delay our development efforts or impact our commercialization of INGREZZA or any of our other products, or any product candidate approved by the FDA in the future.
- We currently have no manufacturing capabilities. If third-party manufacturers of INGREZZA or any of our other products, or any of our product candidates fail to devote sufficient time and resources to our concerns, or if their performance is substandard, our clinical trials and product introductions may be delayed, and our costs may rise.
- We currently depend on a limited number of third-party suppliers. The loss of these suppliers, or delays or problems in the supply of INGREZZA or any of our other products, could materially and adversely affect our ability to successfully commercialize INGREZZA or any of our other products.
- We license some of our core technologies and drug candidates from third parties. If we default on any of our obligations under those licenses, or violate the terms of these licenses, we could lose our rights to those technologies and drug candidates or be forced to pay damages.
- If we are unable to protect our intellectual property, our competitors could develop and market products based on our discoveries, which may reduce demand for our products.
- Health care reform, drug pricing measures and other legislative initiatives could adversely affect our business.
- Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations.
- We have a history of losses and expect to increase our expenses for the foreseeable future, and we may not be able to sustain profitability.
- Our customers are concentrated and therefore the loss of a significant customer may harm our business.
- If we cannot raise additional funding, we may be unable to complete development of our product candidates or establish commercial and manufacturing capabilities in the future.

Risks Related to Our Company

****We may not be able to continue to successfully commercialize INGREZZA or any of our other products, or any of our product candidates if they are approved in the future.***

Our ability to produce INGREZZA revenues consistent with expectations ultimately depends on our ability to continue to successfully commercialize INGREZZA and secure adequate third-party reimbursement. Our experience in marketing and selling pharmaceutical products began with INGREZZA's approval in 2017, when we hired our sales force and established our distribution and reimbursement capabilities, all of which are necessary to successfully commercialize our current and future products. We have continued to invest in our commercial infrastructure and distribution capabilities in the past four years, including the expansion of our specialty sales force, which we announced in the third quarter of 2021 and completed in April 2022. While our team members and consultants have experience marketing and selling pharmaceutical products, we may face difficulties related to managing the rapid growth of our personnel and infrastructure, and there can be no guarantee that we will be able to maintain the personnel, systems, arrangements and capabilities necessary to continue to successfully commercialize INGREZZA or any of our other products, or any product candidate approved by the FDA in the future.

In addition, our business has been and may continue to be adversely affected by the effects of health pandemics or epidemics. In parts of the country, some hospitals, community mental health facilities, and other healthcare facilities continue to have policies that limit access of our sales representatives, medical affairs personnel and patients to such facilities. These policies are likely to change from time to time as communities or regions grapple with outbreaks. These facilities also may be facing staffing shortages that impact their ability to see patients and conduct necessary screenings. In addition, many health care practitioners have adopted telehealth for patient interactions, which may impact the ability of the health care practitioner to screen for and diagnose tardive dyskinesia.

****If physicians and patients do not continue to accept INGREZZA or do not accept any of our other products, or our sales and marketing efforts are not effective, we may not generate sufficient revenue.***

The commercial success of INGREZZA or any of our other products will depend upon the acceptance of those products as safe and effective by the medical community and patients.

The market acceptance of INGREZZA or any of our other products could be affected by a number of factors, including:

- the timing of receipt of marketing approvals for additional indications;
- the safety and efficacy of the products;
- the pricing of our products;
- the availability of healthcare payor coverage and adequate reimbursement for the products;
- public perception regarding any products we may develop;
- the success of existing competitor products addressing our target markets or the emergence of equivalent or superior products; and
- the cost-effectiveness of the products.

If the medical community, patients and payors do not continue to accept our products as being safe, effective, superior and/or cost-effective, we may not generate sufficient revenue.

****Government and third-party payors may impose sales and pharmaceutical pricing controls on our products or limit coverage and/or reimbursement for our products or impose policies and/or make decisions regarding the status of our products that could limit our product revenues and delay sustained profitability.***

Our ability to continue to commercialize INGREZZA successfully or any of our other products, will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available. The continuing efforts of government and third-party payors to contain or reduce the costs of health care and the price of prescription drugs through various means may impact our revenues. These payors' efforts could decrease the price that we receive for any products we may develop and sell in the future.

Assuming we obtain coverage for a given product by a third-party payor, the resulting reimbursement rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the out-of-pocket cost of our products. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available regardless of whether they are approved by the FDA for that particular use. Coverage decisions by payors for our competitors' products may also impact coverage for our products.

Government authorities and other third-party payors are developing increasingly sophisticated methods of controlling healthcare costs, such as by limiting coverage and the amount of reimbursement for particular medications. Further, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. In addition, communications from government officials, media outlets, and others regarding health care costs and pharmaceutical pricing could have a negative impact on our stock price, even if such communications do not ultimately impact coverage or reimbursement decisions for our products.

There may also be significant delays in obtaining coverage and reimbursement for newly approved drugs or indications, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory 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 research, development, manufacture, sale and distribution. In addition, we could also be subject to amendments in our rebate agreements with pharmaceutical benefit managers that require us to pay larger rebate amounts or modify our formulary position, which could have a material adverse effect on our business. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. For example, government authorities could make a decision that adversely impacts the status of one of our products, which could impact the eligibility and/or the amount of government reimbursement for that product.

As a pharmaceutical manufacturer, we are subject to various federal statutes and regulations requiring the reporting of price data and the subsequent provision of concessions to certain purchasers/payors, including state Medicaid programs. Federal agencies issue guidance to manufacturers related to the interpretation of laws and regulations, and this guidance has changed and may change or be updated over time. In interpreting these laws, regulations and guidance, manufacturers may make reasonable assumptions to fill gaps, and these reasonable assumptions may need to be updated upon issuance of additional agency guidance.

If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may be unable to successfully commercialize INGREZZA or any of our other products, or any other product candidate for which we obtain marketing approval in the future. 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. Further, a majority of our current revenue is derived from federal healthcare program payors, including Medicare and Medicaid. Thus, changes in government reimbursement policies, government negotiation of the price of any of products, reductions in payments and/or our suspension or exclusion from participation in federal healthcare programs could have a material adverse effect on our business.

Further, during the COVID-19 pandemic, the use of physician telehealth services has rapidly increased, fueled by an unprecedented expansion of coverage and reimbursement for telehealth services across public and private insurers. The limitations that telehealth places on the ability to conduct a thorough physical examination may impact the ability of providers to screen for movement disorders, leading to fewer patients being diagnosed and/or treated.

****We face intense competition, and if we are unable to compete effectively, the demand for our products may be reduced.***

The biotechnology and pharmaceutical industries are subject to rapid and intense technological change. We face, and will continue to face, competition in the development and marketing of our products and product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies.

Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and
- new small molecule or other classes of therapeutic agents.

Developments by others (including the development of generic equivalents) may render our product candidates or technologies obsolete or noncompetitive.

We are commercializing and performing research on or developing products for the treatment of several disorders including endometriosis, tardive dyskinesia, uterine fibroids, classic congenital adrenal hyperplasia, pain, Parkinson's disease and other neurology, neuroendocrinology and neuropsychiatry-related diseases and disorders, and there are a number of competitors to our products and product candidates. If one or more of our competitors' products or programs are successful (including the development of generic equivalents), the market for our products may be reduced or eliminated.

- INGREZZA competes with AUSTEDO® (deutetrabenazine), which was approved by the FDA for the treatment of tardive dyskinesia in adults in August 2017 and is marketed by Teva Pharmaceutical Industries, and several clinical development-stage programs targeting tardive dyskinesia and related movement disorders. A once-daily dosing of AUSTEDO was introduced in February 2023. Additionally, there are a number of commercially available medicines used to treat tardive dyskinesia off-label, such as XENAZINE® (tetrabenazine) and generic equivalents, and various antipsychotic medications (e.g., clozapine), anticholinergics, benzodiazepines (off-label), and botulinum toxin.

- ORILISSA and ORIAHNN each compete with several FDA-approved products for the treatment of endometriosis, uterine fibroids, infertility and central precocious puberty. Additionally, there is also competition from surgical intervention, including hysterectomies and ablations. Separate from these options, there are many programs in clinical development which serve as potential future competition. Lastly, there are numerous medicines used to treat the symptoms of disease (vs. endometriosis or uterine fibroids directly) which may also serve as competition: oral contraceptives, NSAIDs and other pain medications, including opioids.
- For CAH, high doses of corticosteroids are the current standard of care to both correct the endogenous cortisol deficiency as well as reduce the excessive ACTH levels. In the United States alone, there are more than two dozen companies manufacturing steroid-based products. In addition, there are several programs in clinical development targeting CAH and several companies developing medicinal treatments for CAH.
- Our investigational treatments for potential use in epilepsy may in the future compete with numerous approved anti-seizure medications and development-stage programs being pursued by several other companies. Commonly used anti-seizure medications include phenytoin, levetiracetam, brivaracetam, cenobamate, carbamazepine, clobazam, lamotrigine, valproate, oxcarbazepine, topiramate, lacosamide, perampanel and cannabidiol, among others. There are currently no FDA-approved treatments specifically indicated for the early infantile epileptic encephalopathy SCN8A-DEE; however, a number of different anti-seizure medications are currently used in these patient populations.
- Our investigational treatments for potential use in schizophrenia and depression may in the future compete with several development-stage programs being pursued by other companies. Currently, there are no FDA-approved treatments specifically indicated for cognitive impairment associated with schizophrenia, or CIAS; however, there are a number of different anti-psychotic medications currently used in these patient populations.
- Our investigational treatments for potential use in neurology, neuroendocrinology and neuropsychiatry may in the future compete with numerous approved products and development-stage programs being pursued by several other companies.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- sales and marketing experience;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing, marketing and distribution experience; and
- production facilities.

Moreover, increased competition in certain disorders or therapies may make it more difficult for us to recruit or enroll patients in our clinical trials for similar disorders or therapies.

Because the development of our product candidates is subject to a substantial degree of technological uncertainty, we may not succeed in developing any of our product candidates.

Only a small number of research and development programs ultimately result in commercially successful drugs.

Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. These reasons include the possibilities that the potential products may:

- be found ineffective or cause harmful side effects during preclinical studies or clinical trials;
- fail to receive necessary regulatory approvals on a timely basis or at all;
- be precluded from commercialization by proprietary rights of third parties;
- be difficult to manufacture on a large scale; or
- be uneconomical to commercialize or fail to achieve market acceptance.

If any of our product candidates encounters any of these potential problems, we may never successfully market that product candidate.

****Our clinical trials may be delayed for safety or other reasons or fail to demonstrate the safety and efficacy of our product candidates, which could prevent or significantly delay their regulatory approval.***

Before obtaining regulatory approval for the sale of any of our potential products, we must subject these product candidates to extensive preclinical and clinical testing to demonstrate their safety and efficacy for humans. Clinical trials are expensive, time-consuming and may take years to complete and the outcomes are uncertain.

In connection with the clinical trials of our product candidates, we face the risks that:

- the FDA or similar foreign regulatory authority may not allow an IND or foreign equivalent filings required to initiate human clinical studies for our drug candidates or the FDA may require additional preclinical studies as a condition of the initiation of Phase I clinical studies, or additional clinical studies for progression from Phase I to Phase II, or Phase II to Phase III, or for NDA approval;
- the product candidate may not prove to be effective or as effective as other competing product candidates;
- we may discover that a product candidate may cause harmful side effects or results of required toxicology or other studies may not be acceptable to the FDA;
- clinical trial results may not replicate the results of previous trials;
- the FDA or similar foreign regulatory authorities may require use of new or experimental endpoints that may prove insensitive to treatment effects;
- we or the FDA or similar foreign regulatory authorities may suspend the trials;
- the results may not be statistically significant;
- clinical site initiation or patient recruitment and enrollment may be slower or more difficult than expected;
- the FDA may not accept the data from any trial or trial site outside of the United States;
- patients may drop out of the trials;
- unforeseen disruptions or delays may occur, caused by man-made or natural disasters or public health pandemics or epidemics or other business interruptions, including, for example, the COVID-19 pandemic and the conflict between Russia and Ukraine; and
- regulatory requirements may change.

These risks and uncertainties impact all of our clinical programs and any of the clinical, regulatory or operational events described above could change our planned clinical and regulatory activities. Additionally, any of these events described above could result in suspension of a program and/or obviate any filings for necessary regulatory approvals.

In addition, late-stage clinical trials are often conducted with patients having the most advanced stages of disease. During the course of treatment, these patients can die or suffer other adverse medical effects for reasons that may not be related to the pharmaceutical agent being tested but which can nevertheless adversely affect clinical trial conduct, completion and results. Any failure or substantial delay in completing clinical trials for our product candidates may severely harm our business.

Even if the clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

****Several of our planned clinical trial sites have been impacted and made unavailable as a result of the conflict between Russia and Ukraine.***

In February 2022, Russia commenced a military invasion of Ukraine. We had planned clinical trial sites in both Russia and Ukraine, but no patients yet enrolled. Ongoing geopolitical turmoil and continuing military action in the region, together with widening sanctions imposed on Russia, have caused us to suspend all planned clinical trial activities in Russia and Ukraine. Alternative clinical trial sites that would fully and timely replace our planned clinical trial activities in Ukraine and Russia have been challenging to obtain. Our planned clinical development timelines for valbenazine and luvadaxistat have been significantly delayed, which has increased our development costs and delayed the development and/or regulatory approval process of such product candidates and could jeopardize our ability to commence product sales and generate revenues.

****We depend on our current collaborators for the development and commercialization of several of our products and product candidates and may need to enter into future collaborations to develop and commercialize certain of our product candidates.***

We depend on our current collaborators for the development and commercialization of several of our products and product candidates and may need to enter into future collaborations to develop and commercialize certain of our product candidates. For example, we depend on AbbVie for the manufacture and commercialization of ORILISSA and ORIAHNN and for the continued development of elagolix. We collaborate with MTPC for the commercialization of DYSVAL in Japan and for the continued development and commercialization of valbenazine for movement disorders in other select Asian markets. In addition, we collaborate with Xenon Pharmaceuticals, Inc. for the development of NBI-921352, Idorsia Pharmaceuticals Ltd. for the development of NBI-827104, Takeda Pharmaceutical Company Limited for the development of luvadaxistat, NBI-1065845 and NBI-1065846, Heptares Therapeutics Limited for the development of NBI-1117568 and Voyager Therapeutics, Inc. for the research and development of gene therapy products.

Our current and future collaborations and licenses could subject us to a number of risks, including:

- strategic collaborators may sell, transfer or divest assets or programs related to our partnered product or product candidates;
- we may be required to undertake the expenditure of substantial operational, financial and management resources;
- we may be required to assume substantial actual or contingent liabilities;
- we may not be able to control the amount and timing of resources that our strategic collaborators devote to the development or commercialization of our products or product candidates;
- we may not be able to influence our strategic collaborator's decisions regarding the development and collaboration of our partnered product and product candidates, and as a result, our collaboration partners may not pursue or prioritize the development and commercialization of those partnered products and product candidates in a manner that is in our best interest;
- strategic collaborators may select indications or design clinical trials in a way that may be less successful than if we were doing so;
- strategic collaborators may not conduct collaborative activities in a timely manner, provide insufficient funding, terminate a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new version of a product candidate for clinical testing;
- strategic collaborators may not pursue further development and commercialization of products resulting from the strategic collaboration arrangement or may elect to discontinue research and development programs;
- disagreements or disputes may arise between us and our strategic collaborators that result in delays or in costly litigation or arbitration that diverts management's attention and consumes resources;
- strategic collaborators may experience financial difficulties;
- strategic collaborators may not properly maintain, enforce or defend our intellectual property rights or may use our proprietary information in a manner that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- strategic collaborators could terminate the arrangement or allow it to expire, which would delay the development and commercialization and may increase the cost of developing and commercializing our products or product candidates; and
- strategic collaborators could develop, either alone or with others, products or product candidates that may compete with ours.

If any of these issues arise, it may delay and/or negatively impact the development and commercialization of drug candidates and, ultimately, our generation of product revenues.

****We may not be able to successfully commercialize ONGENTYS.***

In April 2020, we received FDA approval for ONGENTYS as an adjunctive therapy to levodopa/DOPA decarboxylase inhibitors in adult Parkinson's disease patients, and in September 2020, we launched the commercial sale of ONGENTYS with our existing commercial infrastructure. The successful commercialization of ONGENTYS is subject to many risks, including a number of factors that are outside our control. We may be unable to convince payors to reimburse for ONGENTYS; and patients may be unwilling to use ONGENTYS if insurance coverage is not provided or reimbursement is inadequate. In the first quarter of 2023, we provided notice to terminate our license to commercialize ONGENTYS. The termination is anticipated to be effective in December 2023.

Use of our approved products or those of our collaborators could be associated with side effects or adverse events.

As with most pharmaceutical products, use of our approved products or those of our collaborators could be associated with side effects or adverse events which can vary in severity (from minor adverse reactions to death) and frequency (infrequent or prevalent). Side effects or adverse events associated with the use of our products or those of our collaborators may be observed at any time, including after a product is commercialized, and reports of any such side effects or adverse events may negatively impact demand for our or our collaborators' products or affect our or our collaborators' ability to maintain regulatory approval for such products. Side effects or other safety issues associated with the use of our approved products or those of our collaborators could require us or our collaborators to modify or halt commercialization of these products or expose us to product liability lawsuits which will harm our business. We or our collaborators may be required by regulatory agencies to conduct additional studies regarding the safety and efficacy of our products which we have not planned or anticipated. Furthermore, there can be no assurance that we or our collaborators will resolve any issues related to any product related adverse events to the satisfaction of the FDA or any regulatory agency in a timely manner or ever, which could harm our business, prospects and financial condition.

****We have recently increased the size of our organization and will need to continue to increase the size of our organization. We may encounter difficulties with managing our growth, which could adversely affect our results of operations.***

As of June 30, 2023, we had approximately 1,350 full-time employees. Although we have substantially increased the size of our organization, we may need to add additional qualified personnel and resources, especially with the recent increase in the size of our sales force. Our current infrastructure may be inadequate to support our development and commercialization efforts and expected growth. Future growth will impose significant added responsibilities on our organization, including the need to identify, recruit, maintain and integrate additional employees and create and expand new processes and procedures and may be costly and take time away from running other aspects of our business, including development and commercialization of our product candidates.

Our future financial performance and our ability to commercialize INGREZZA and any of our other products, or any of our product candidates that receive regulatory approval in the future, will partially depend on our ability to manage any future growth effectively. In particular, as we commercialize INGREZZA, we will need to support the training and ongoing activities of our sales force and will likely need to continue to expand the size of our employee base for managerial, operational, financial and other resources. To that end, we must be able to successfully:

- manage our development efforts effectively;
- integrate additional management, administrative and manufacturing personnel;
- further develop our marketing and sales organization;
- compensate our employees on adequate terms in an increasingly competitive, inflationary market;
- attract and retain personnel; and
- maintain sufficient administrative, accounting and management information systems and controls.

We may not be able to accomplish these tasks or successfully manage our operations and, accordingly, may not achieve our research, development and commercialization goals. Our failure to accomplish any of these goals could harm our financial results and prospects.

****If we are unable to retain and recruit qualified scientists and other employees or if any of our key senior executives discontinues his or her employment with us, it may delay our development efforts or impact our commercialization of INGREZZA or any of our other products, or any product candidate approved by the FDA in the future.***

We are highly dependent on the principal members of our management, commercial and scientific staff. The loss of any of these people could impede the achievement of our objectives, including the successful commercialization of INGREZZA or any of our other products, or any product candidate approved by the FDA in the future. Furthermore, recruiting and retaining qualified scientific personnel to perform research and development work in the future, along with personnel with experience marketing and selling pharmaceutical products, is critical to our success. We may be unable to attract and retain personnel on acceptable terms given the competition among biotechnology, pharmaceutical and health care companies, universities and non-profit research institutions for experienced scientists and individuals with experience marketing and selling pharmaceutical products. We may face particular retention challenges in light of the recent rapid growth in our personnel and infrastructure and the perceived impact of those changes upon our corporate culture. In addition, we rely on a significant number of consultants to assist us in formulating our research and development strategy and our commercialization strategy. Our consultants may have commitments to, or advisory or consulting agreements with, other entities that may limit their availability to us.

****We currently have no manufacturing capabilities. If third-party manufacturers of INGREZZA or any of our other products, or any of our product candidates fail to devote sufficient time and resources to our concerns, or if their performance is substandard, our clinical trials and product introductions may be delayed, and our costs may rise.***

We have in the past utilized, and intend to continue to utilize, third-party manufacturers to produce the drug compounds we use in our clinical trials and for the commercialization of our products. We have limited experience in manufacturing products for commercial purposes and do not currently have any manufacturing facilities. Establishing internal commercial manufacturing capabilities would require significant time and resources, and we may not be able to timely or successfully establish such capabilities. Consequently, we depend on, and will continue to depend on, several contract manufacturers for all production of products for development and commercial purposes, including INGREZZA. If we are unable to obtain or retain third-party manufacturers, we will not be able to develop or commercialize our products, including INGREZZA. The manufacture of our products for clinical trials and commercial purposes is subject to specific FDA regulations, including current Good Manufacturing Practice regulations. Our third-party manufacturers might not comply with FDA regulations relating to manufacturing our products for clinical trials and commercial purposes or other regulatory requirements now or in the future. Our reliance on contract manufacturers also exposes us to the following risks:

- contract manufacturers may encounter difficulties in achieving volume production, quality control or quality assurance, and also may experience shortages in qualified personnel or materials and ingredients necessary to conduct their operations. As a result, our contract manufacturers might not be able to meet our clinical schedules or adequately manufacture our products in commercial quantities when required;
- switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all;
- our contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store or distribute our products; and
- drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the United States Drug Enforcement Administration, and other agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

Our current dependence upon third parties for the manufacture of our products may reduce our profit margin, if any, on the sale of INGREZZA or any of our other products, or our future products and our ability to develop and deliver products on a timely and competitive basis.

****We currently depend on a limited number of third-party suppliers. The loss of these suppliers, or delays or problems in the supply of INGREZZA or any of our other products, could materially and adversely affect our ability to successfully commercialize INGREZZA or any of our other products.***

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of process controls required to consistently produce the active pharmaceutical ingredients, or API, the finished drug product and packaging in sufficient quantities while meeting detailed product specifications on a repeated basis. Manufacturers of pharmaceutical products may encounter difficulties in production, such as difficulties with production costs and yields, process controls, quality control and quality assurance, including testing of stability, impurities and impurity levels and other product specifications by validated test methods, compliance with strictly enforced United States, state and non-United States regulations, and disruptions or delays caused by man-made or natural disasters, pandemics or epidemics, or other business interruptions. We depend on a limited number of suppliers for the production and packaging of INGREZZA and its API. If our third-party suppliers for INGREZZA encounter these or any other manufacturing, quality or compliance difficulties, we may be unable to meet commercial demand for INGREZZA, which could materially and adversely affect our ability to successfully commercialize INGREZZA.

In addition, if our suppliers fail or refuse to supply us with INGREZZA or its API for any reason, it would take a significant amount of time and expense to qualify a new supplier. The FDA and similar international regulatory bodies must approve manufacturers of the active and inactive pharmaceutical ingredients and certain packaging materials used in pharmaceutical products. The loss of a supplier could require us to obtain regulatory clearance and to incur validation and other costs associated with the transfer of the API or product manufacturing processes. If there are delays in qualifying new suppliers or facilities or if a new supplier is unable to meet FDA or a similar international regulatory body's requirements for approval, there could be a shortage of INGREZZA, which could materially and adversely affect our ability to successfully commercialize INGREZZA.

The independent clinical investigators and contract research organizations that we rely upon to conduct our clinical trials may not be diligent, careful or timely, or may make mistakes in the conduct of our trials.

We depend on independent clinical investigators and CROs to conduct our clinical trials under their agreements with us. The investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. If our independent investigators fail to devote sufficient time and resources to our drug development programs, or if their performance is substandard, or not in compliance with Good Clinical Practices, it may delay or prevent the approval of our regulatory applications and our introduction of new treatments. The CROs we contract with for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Failure of the CROs to meet their obligations could adversely affect clinical development of our products. Moreover, these independent investigators and CROs may also have relationships with other commercial entities, some of which may compete with us. If independent investigators and CROs assist our competitors at our expense, it could harm our competitive position.

We do not and will not have access to all information regarding the products and product candidates we licensed to AbbVie.

We do not and will not have access to all information regarding elagolix, including potentially material information about commercialization plans, medical information strategies, clinical trial design and execution, safety reports from clinical trials, safety reports, regulatory affairs, process development, manufacturing and other areas known by AbbVie. In addition, we have confidentiality obligations under our agreement with AbbVie. Thus, our ability to keep our shareholders informed about the status of elagolix will be limited by the degree to which AbbVie keeps us informed and allows us to disclose such information to the public. If AbbVie fails to keep us informed about commercialization efforts related to elagolix, or the status of the clinical development or regulatory approval pathway of other product candidates licensed to it, we may make operational and/or investment decisions that we would not have made had we been fully informed, which may materially and adversely affect our business and operations.

We are subject to ongoing obligations and continued regulatory review for INGREZZA. Additionally, our other product candidates, if approved, could be subject to labeling and other post-marketing requirements and restrictions.

Regulatory approvals for any of our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. For example, with respect to the FDA's approval of INGREZZA for tardive dyskinesia in April 2017, we are subject to certain post-marketing requirements and commitments. In addition, with respect to INGREZZA, and any product candidate that the FDA or a comparable foreign regulatory authority approves, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with Good Clinical Practices for any clinical trials that we conduct post-approval. Failure to comply with these ongoing regulatory requirements, or later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, changes in the product's label, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning or untitled letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product license approvals;
- adverse inspection findings or other activities that temporarily delay manufacture and distribution of our products;
- product seizure or detention, or refusal to permit the import or export of products; and
- product injunctions or the imposition of civil or criminal penalties.

The occurrence of any of these events may adversely affect our business, prospects and ability to achieve or sustain profitability on a sustained basis.

****If the market opportunities for our products and product candidates are smaller than we believe they are, our expected revenues may be adversely affected, and our business may suffer.***

Certain of the diseases that INGREZZA and our other product candidates are being developed to address are in underserved and underdiagnosed populations. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who will seek treatment utilizing our products or product candidates, may not be accurate. If our estimates of the prevalence or number of patients potentially on therapy prove to be inaccurate, the market opportunities for INGREZZA and our other product candidates may be smaller than we believe they are, our prospects for generating expected revenue may be adversely affected and our business may suffer.

****We license some of our core technologies and drug candidates from third parties. If we default on any of our obligations under those licenses, or violate the terms of these licenses, we could lose our rights to those technologies and drug candidates or be forced to pay damages.***

We are dependent on licenses from third parties for some of our key technologies. These licenses typically subject us to various commercialization, reporting and other obligations. If we fail to comply with these obligations, we could lose important rights. If we were to default on our obligations under any of our licenses, we could lose some or all of our rights to develop, market and sell products covered by these licenses. In addition, several of our collaboration and license agreements allow our licensors to terminate such agreements if we challenge the validity or enforceability of certain intellectual property rights or if we commit a material breach in whole or in part of the agreement and do not cure such breach within the agreed upon cure period. In addition, if we were to violate any of the terms of our licenses, we could become subject to damages. Likewise, if we were to lose our rights under a license to use proprietary research tools, it could adversely affect our existing collaborations or adversely affect our ability to form new collaborations. We also face the risk that our licensors could, for a number of reasons, lose patent protection or lose their rights to the technologies we have licensed, thereby impairing or extinguishing our rights under our licenses with them.

Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations.

In May 2017, we sold \$517.5 million aggregate principal amount of the 2024 Notes. In the fourth quarter of 2020, we entered into separate, privately negotiated transactions with certain holders of the 2024 Notes to repurchase \$136.2 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$186.9 million in cash. In the second quarter of 2022, we entered into separate, privately negotiated transactions with certain holders of the 2024 Notes to repurchase \$210.8 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$279.0 million in cash. As of June 30, 2023, \$170.4 million aggregate principal amount of the 2024 Notes remained outstanding. We may also incur additional indebtedness to meet future financing needs. Our indebtedness could have significant negative consequences for our security holders and our business, results of operations and financial condition by, among other things:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, which will reduce the amount of cash available for other purposes;
- limiting our flexibility to plan for, or react to, changes in our business;
- diluting the interests of our existing stockholders as a result of issuing shares of our common stock upon conversion of the 2024 Notes; and
- placing us at a possible competitive disadvantage with competitors that are less leveraged than us or have better access to capital.

Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under the 2024 Notes and any additional indebtedness that we may incur. In addition, our cash needs may increase in the future. In addition, any future indebtedness that we may incur may contain financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full.

****We have a history of losses and expect to increase our expenses for the foreseeable future, and we may not be able to sustain profitability.***

Since our inception, we have incurred significant net losses and negative cash flow from operations. As of June 30, 2023, we had an accumulated deficit of \$387.9 million as a result of historical operating losses.

We received FDA approval for INGREZZA for tardive dyskinesia in April 2017 and for ONGENTYS for Parkinson's disease in April 2020. Our partner AbbVie received FDA approval for ORLISSA for endometriosis in July 2018 and for ORIAHNN for uterine fibroids in May 2020. Additionally, our partner MTPC received Japanese Ministry of Health, Labour and Welfare approval for DYSVAL for the treatment of tardive dyskinesia in March 2022. However, we have not yet obtained regulatory approvals for any other product candidates. Even if we continue to succeed in commercializing INGREZZA, or are successful in developing and commercializing any of our other product candidates, we may not be able to sustain profitability. We also expect to continue to incur significant operating and capital expenditures as we:

- commercialize INGREZZA for tardive dyskinesia;
- seek regulatory approvals for our product candidates or for additional indications for our current products;
- develop, formulate, manufacture and commercialize our product candidates;
- in-license or acquire new product development opportunities;
- implement additional internal systems and infrastructure; and
- hire additional clinical, scientific, sales and marketing personnel.

We expect to increase our expenses and other investments in the coming years as we fund our operations and capital expenditures. Thus, our future operating results and profitability may fluctuate from period to period due to the factors described above, and we will need to generate significant revenues to achieve and maintain profitability and positive cash flow on a sustained basis. We may not be able to generate these revenues, and we may never achieve profitability on a sustained basis in the future. Our failure to maintain or increase profitability on a sustained basis could negatively impact the market price of our common stock.

We may be subject to claims that we or our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is commonplace in the biotechnology industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

****Because our operating results may vary significantly in future periods, our stock price may decline.***

Our quarterly revenues, expenses and operating results have fluctuated in the past and are likely to fluctuate significantly in the future. Our financial results are unpredictable and may fluctuate, for among other reasons, due to seasonality and timing of customer purchases and commercial sales of INGREZZA, royalties from out-licensed products, the impact of Medicare Part D coverage, including redesign of the Part D benefit enacted as part of the Inflation Reduction Act, our achievement of product development objectives and milestones, clinical trial enrollment and expenses, research and development expenses and the timing and nature of contract manufacturing, contract research payments, fluctuations in our effective tax rate, and disruptions caused by man-made or natural disasters or public health pandemics or epidemics or other business interruptions, including, for example, the conflict between Russia and Ukraine. Because a majority of our costs are predetermined on an annual basis, due in part to our significant research and development costs, small declines in revenue could disproportionately affect financial results in a quarter. Thus, our future operating results and profitability may fluctuate from period to period, and even if we become profitable on a quarterly or annual basis, we may not be able to sustain or increase our profitability. Moreover, as our company and our market capitalization have grown, our financial performance has become increasingly subject to quarterly and annual comparisons with the expectations of securities analysts or investors. The failure of our financial results to meet these expectations, either in a single quarterly or annual period over a sustained period time, could cause our stock price to decline.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flows, financial condition or results of operations.

Effective January 1, 2022, legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct research and development expenses for tax purposes in the year incurred and requires taxpayers to capitalize and subsequently amortize such expenses over five years for research activities conducted in the United States and over 15 years for research activities conducted outside the United States. Unless the United States Department of the Treasury issues regulations that narrow the application of this provision to a smaller subset of our research and development expenses or the provision is deferred, modified, or repealed by Congress, we expect a material decrease in our cash flows from operations and an offsetting similarly sized increase in our net deferred tax assets over these amortization periods. The actual impact of this provision will depend on multiple factors, including the amount of research and development expenses we will incur and whether we conduct our research and development activities inside or outside the United States.

In addition, new income, sales, use, excise or other tax laws, statutes, rules, regulations 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 Tax Cuts and Jobs Act of 2017, the Coronavirus Aid, Relief, and Economic Security Act and the Inflation Reduction Act enacted many significant changes to the United States tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to such legislation may affect us, and certain aspects of such legislation could be repealed or modified in future legislation. Furthermore, it is uncertain if and to what extent various states will conform to federal tax laws. Future tax 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 United States tax expense.

****Our ability to use net operating loss carryforwards and certain other tax attributes may be limited.***

Our net operating loss, or NOL, carryforwards generated in tax years beginning on or prior to December 31, 2017, are only permitted to be carried forward for 20 years under applicable United States tax law. Under current law, our federal NOLs generated in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal NOLs is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to federal tax laws. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation’s ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. Based on completed Section 382 analysis done, we do not believe we have experienced any previous ownership changes, but the determination is complex and there can be no assurance we are correct. Furthermore, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of our control.

As a result, our pre-2018 NOL carryforwards may expire prior to being used and our NOL carryforwards generated in tax years beginning after December 31, 2017, will be subject to a percentage limitation and, if we undergo an ownership change (or if we previously underwent such an ownership change), our ability to use all of our pre-change NOLs and other pre-change tax attributes (such as research tax credits) to offset our post-change income or taxes may be limited. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, we may be unable to use all or a material portion of our NOLs and other tax attributes, which could adversely affect our future cash flows.

****Our effective tax rate may fluctuate, and we may incur obligations in tax jurisdictions in excess of accrued amounts.***

Our effective tax rate is derived from a combination of applicable tax rates in the various places that we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each such place. Nevertheless, our effective tax rate may be different than experienced in the past due to numerous factors, including the impact of stock-based compensation, changes in the mix of our profitability from jurisdiction to jurisdiction, the results of examinations and audits of our tax filings, our inability to secure or sustain acceptable agreements with tax authorities, changes in accounting for income taxes and changes in tax laws. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations and may result in tax obligations in excess of amounts accrued in our financial statements.

In addition, on December 31, 2020, we determined, based on our facts and circumstances, that it was more likely than not that a substantial portion of our deferred tax assets would be realized and, as a result, substantially all of our valuation allowance against our deferred tax assets was released. Therefore, beginning in 2021, we commenced recording income tax expense at an estimated tax rate that will likely approximate statutory tax rates, which could result in a significant reduction in our net income and net income per share.

****The price of our common stock is volatile.***

The market prices for securities of biotechnology and pharmaceutical companies historically have been highly volatile, and the market for these securities has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. The COVID-19 pandemic, for example, has negatively affected the stock market and investor sentiment and has resulted in significant volatility, as has the applicability of the Medicare drug price negotiation provisions in the Inflation Reduction Act. Furthermore, especially as we and our market capitalization have grown, the price of our common stock has been increasingly affected by quarterly and annual comparisons with the valuations and recommendations of the analysts who cover our business. If our results do not meet these analysts’ forecasts, the expectations of our investors or the financial guidance we provide to investors in any period, which is based on assumptions that may be incorrect or that may change from quarter to quarter, the market price of our common stock could decline. Over the course of the last 12 months, the price of our common stock has ranged from approximately \$89 per share to approximately \$129 per share.

The market price of our common stock may fluctuate in response to many factors, including:

- sales of INGREZZA and our other products;
- the status and cost of our post-marketing commitments for INGREZZA;
- the results of our clinical trials;
- reports of safety issues related to INGREZZA, ONGENTYS, ORLISSA, ORIAHNN, DYSVAL, or any of our other products;
- developments concerning new and existing collaboration agreements;
- announcements of technological innovations or new therapeutic products by us or others, including our competitors;
- general economic and market conditions, including economic and market conditions affecting the biotechnology industry;
- developments in patent or other proprietary rights;
- developments related to the FDA, CMS and foreign regulatory agencies;
- future sales of our common stock by us or our stockholders;
- comments by securities analysts;
- additions or departures of key personnel;
- fluctuations in our operating results;
- potential litigation matters and developments in existing litigation matters, such as the ANDA litigation matters;
- government regulation, including the Inflation Reduction Act;
- government and third-party payor coverage and reimbursement;
- failure of any of our product candidates, if approved, to achieve commercial success;
- disruptions caused by man-made or natural disasters, pandemics or epidemics or other business interruptions, including, for example, the COVID-19 pandemic and the conflict between Russia and Ukraine; and
- public concern as to the safety of our drugs.

In addition, we are a member of the S&P MidCap 400 index. If we cease to be represented in the S&P MidCap 400 index, or other indexes or indexed products, as a result of our market capitalization falling below the threshold for inclusion in the index, certain institutional shareholders may, due to their internal policies and investment guidelines, be required to sell their shareholdings. Such sales may result in further negative pressure on our stock price and, when combined with reduced trading volume and liquidity, could adversely affect the value of your investment and your ability to sell your shares.

****Our customers are concentrated and therefore the loss of a significant customer may harm our business.***

We have entered into agreements for the distribution of INGREZZA with a limited number of specialty pharmacy providers and distributors, and all of our product sales of INGREZZA are to these customers. Four of these customers represented approximately 91% of our total product revenue for the six months ended June 30, 2023 and approximately 96% of our accounts receivable balance as of June 30, 2023. If any of these significant customers becomes subject to bankruptcy, is unable to pay us for our products or is acquired by a company that wants to terminate the relationship with us, or if we otherwise lose any of these significant customers, our revenue, results of operations and cash flows would be adversely affected. Even if we replace the loss of a significant customer, we cannot predict with certainty that such transition would not result in a decline in our revenue, results of operations and cash flows.

****If we cannot raise additional funding, we may be unable to complete development of our product candidates or establish commercial and manufacturing capabilities in the future.***

We may require additional funding to continue our research and development programs, to conduct preclinical studies and clinical trials, for operating expenses, to pursue regulatory approvals for our product candidates, for the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims, if any, and the cost of product in-licensing and any possible acquisitions. In addition, we may require additional funding to establish manufacturing and marketing capabilities in the future. We believe that our existing capital resources and anticipated revenues will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, these resources might be insufficient to conduct research and development programs, the cost of product in-taking and possible acquisitions, fully commercialize products and operate the company to the full extent currently planned. If we cannot obtain adequate funds, we may be required to significantly curtail our commercial plans or one or more of our research and development programs or obtain funds through additional arrangements with corporate collaborators or others that may require us to relinquish rights to some of our technologies or product candidates.

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

- the commercial success of INGREZZA, ORILISSA, ORIAHNN, DYSVAL, and/or any of our other products;
- debt services obligations on the 2024 Notes;
- continued scientific progress in our R&D and clinical development programs;
- the magnitude and complexity of our research and development programs;
- progress with preclinical testing and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the cost involved in filing and pursuing patent applications, enforcing patent claims, or engaging in interference proceedings or other patent litigation;
- costs associated with securing adequate coverage and reimbursement for our products;
- competing technological and market developments;
- developments related to any future litigation;
- the cost of commercialization activities and arrangements, including advertising campaigns;
- the cost of manufacturing our product candidates;
- the impact of the COVID-19 pandemic on our business; and
- the cost of any strategic alliances, collaborations, product in-licensing, or acquisitions.

We intend to seek additional funding through strategic alliances and may seek additional funding through public or private sales of our securities, including equity securities. In addition, during the second quarter of 2017, we issued the 2024 Notes and we have previously financed capital purchases and may continue to pursue opportunities to obtain additional debt financing in the future. In the fourth quarter of 2020, we entered into separate, privately negotiated transactions with certain holders of the 2024 Notes to repurchase \$136.2 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$186.9 million in cash. In the second quarter of 2022, we entered into separate, privately negotiated transactions with certain holders of the 2024 Notes to repurchase \$210.8 million aggregate principal amount of the 2024 Notes for an aggregate repurchase price of \$279.0 million in cash. As of June 30, 2023, \$170.4 million aggregate principal amount of the 2024 Notes remained outstanding. Additional equity or debt financing might not be available on reasonable terms, if at all. In addition, disruptions due to the COVID-19 pandemic could make it more difficult for us to access capital. Any additional equity financings will be dilutive to our stockholders and any additional debt financings may involve operating covenants that restrict our business.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act, new SEC regulations and Nasdaq rules, are creating uncertainty for companies such as ours. These laws, regulations and standards are subject to varying interpretations in some cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, our efforts to comply with evolving laws, regulations and standards have resulted in, and are likely to continue to result in, increased selling, general and administrative expenses and management time related to compliance activities. If we fail to comply with these laws, regulations and standards, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our common stock.

Increasing use of social media could give rise to liability and result in harm to our business.

Our employees are increasingly utilizing social media tools and our website as a means of communication. Despite our efforts to monitor social media communications, there is risk that the unauthorized use of social media by our employees to communicate about our products or business, or any inadvertent disclosure of material, nonpublic information through these means, may result in violations of applicable laws and regulations, which may give rise to liability and result in harm to our business. In addition, there is also risk of inappropriate disclosure of sensitive information, which could result in significant legal and financial exposure and reputational damages that could potentially have a material adverse impact on our business, financial condition and results of operations. Furthermore, negative posts or comments about us or our products on social media could seriously damage our reputation, brand image and goodwill.

****Our business could be adversely affected by the effects of health pandemics or epidemics, including the COVID-19 pandemic, which could also cause significant disruption in the operations of third-party manufacturers CROs, or other third parties upon whom we rely.***

Our business could be adversely affected by the effects of health pandemics or epidemics, which could also cause significant disruption in the operations of third-party manufacturers, CROs and other third parties upon whom we rely. As a result, we may experience disruptions that could severely impact our supply chain, ongoing and future clinical trials and commercialization of INGREZZA or any of our other products. In response to the COVID-19 pandemic, we implemented a remote work model for all employees except certain key essential members involved in business-critical activities. Our employees have resumed in-person interactions and have returned to the office under flexible work guidelines. However, as the effects of the pandemic continue to evolve, a remote work model may nevertheless need to be reinstated at some point in the future. The effects of a remote and flexible work model may negatively impact productivity, disrupt our business and delay our clinical programs and timelines, the magnitude of which will depend on our ability to conduct our business in the ordinary course. Remote work may also create increased risks to our information technology systems and data, as more of our employees utilize network connections, computers and devices outside our premises or network, including working at home, while in transit and in public locations. In addition, we may face several challenges or disruptions upon a return back to the workplace, including re-integration challenges by our employees and distractions to management related to such transition. These and similar, and perhaps more severe, disruptions in our operations due to the COVID-19 pandemic could negatively impact our business, operating results and financial condition.

In addition, clinical site initiation and patient enrollment may be delayed due to concerns for patient safety. Some patients may not be able to comply with clinical trial protocols and our ability to recruit and retain patients, principal investigators and site staff may be hindered, which would adversely impact our clinical trial operations.

The ultimate effects of the COVID-19 pandemic or a similar health pandemic or epidemic is highly uncertain and subject to continued change and these effects could have a material impact on our operations, or the operations of third parties on whom we rely.

Risks Related to Our Industry

If we are unable to protect our intellectual property, our competitors could develop and market products based on our discoveries, which may reduce demand for our products.

Our success will depend on our ability to, among other things:

- obtain patent protection for our products;
- preserve our trade secrets;
- prevent third parties from infringing upon our proprietary rights; and
- operate without infringing upon the proprietary rights of others, both in the United States and internationally.

Because of the substantial length of time and expense associated with bringing new products through the development and regulatory approval processes in order to reach the marketplace, the pharmaceutical industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Accordingly, we intend to seek patent protection for our proprietary technology and compounds. However, we face the risk that we may not obtain any of these patents and that the breadth of claims we obtain, if any, may not provide adequate protection of our proprietary technology or compounds.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, through confidentiality agreements with our commercial collaborators, employees and consultants. We also have invention or patent assignment agreements with our employees and some, but not all, of our commercial collaborators and consultants. However, if our employees, commercial collaborators or consultants breach these agreements, we may not have adequate remedies for any such breach, and our trade secrets may otherwise become known or independently discovered by our competitors.

In addition, although we own a number of patents, the issuance of a patent is not conclusive as to its validity or enforceability, and third parties may challenge the validity or enforceability of our patents. We cannot assure you how much protection, if any, will be given to our patents if we attempt to enforce them and they are challenged in court or in other proceedings. It is possible that a competitor may successfully challenge our patents or that challenges will result in limitations of their coverage. Moreover, competitors may infringe our patents or successfully avoid them through design innovation. In addition, potential competitors have in the past and may in the future file an ANDA with the FDA seeking approval to market a generic version of our products, or our competitors' products, before the expiration of the patents covering our products or our competitors' products, as applicable. To prevent infringement or unauthorized use, we have in the past and may in the future need to file infringement claims, which are expensive and time-consuming. For example, we are currently engaged in various intellectual property litigation matters against potential competitors related to INGREZZA. Refer to Item 1. Legal Proceedings for a more detailed description of these matters. In addition, in an infringement proceeding a court may decide that a patent of ours or a patent of a competitor is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover its technology. Derivation proceedings declared by the United States Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications (or those of our licensors) or a patent of a competitor. Litigation or derivation proceedings may fail and, even if successful, may result in substantial costs and be a distraction to management. Litigation or derivation proceedings, including proceedings of a competitor, may also result in a competitor entering the marketplace faster than expected. We cannot assure you that we will be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

**Enacted health care reform, drug pricing measures and other recent legislative initiatives could adversely affect our business.*

The business and financial condition of pharmaceutical and biotechnology companies are affected by the efforts of government and third-party payors to contain or reduce the costs of health care and to lower drug prices. In the United States, comprehensive drug pricing legislation enacted by the Federal government implements, for the first time, government control over the pricing of certain prescription pharmaceuticals. Moreover, in some foreign jurisdictions, pricing of prescription pharmaceuticals is also subject to government control. Additionally, other federal and state laws impose obligations on manufacturers of pharmaceutical products, among others, related to disclosure of new drug products introduced to the market and increases in drug prices above a specified threshold.

For example, in August 2022, President Biden signed into law the Inflation Reduction Act of 2022, or the IRA, which, among other things: (1) directs the Secretary of the U.S. Department of Health and Human Services, or HHS, to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare; (2) redesigns the Medicare Part D prescription drug benefit to lower patient out-of-pocket costs and increase manufacturer liability; and (3) requires drug manufacturers to pay rebates on drugs whose prices increase greater than the rate of inflation. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in the ACA marketplaces through plan year 2025 and eliminates the “donut hole” under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost to \$2,000 and through a newly established manufacturer discount program. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. HHS has issued and updated and will continue to issue and update guidance as these programs are implemented. These provisions take effect progressively starting in 2023, although aspects of the law are subject to legal challenges. It is currently unclear how the IRA will be implemented; however, it is likely to have a significant impact on the pharmaceutical industry and prescription drug pricing.

While the IRA targets high-expenditure drugs that have been on the market for several years without generic or biosimilar competition, we believe we will qualify for the small biotech exception from negotiation that is set to expire in 2029. However, the qualification for this exception is subject to various requirements and there is no assurance that we will continue to qualify for this exemption in the future. Further, the loss of this exception or the potential loss of this exception, including as a result of a potential acquisition or strategic transaction, could have an adverse impact on our business.

Prior to the IRA’s enactment, the most significant recent federal legislation impacting the pharmaceutical industry occurred in March 2010. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, was signed into law, which was intended to broaden access to health insurance and reduce the number of uninsured individuals, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the health industry and impose additional health policy reforms.

Other legislative changes have been adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013 and, due to subsequent legislative amendments to the statute, including the Infrastructure Investment and Jobs Act and Consolidated Appropriations Act of 2023, will remain in effect until 2032. The American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including Prescription Drug Affordability Boards, price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. The implementation of these cost containment measures may prevent us from being able to generate revenue, attain sustained profitability or commercialize our drugs, particularly since the majority of our current revenue is derived from federal healthcare programs, including Medicare and Medicaid.

****Proposed health care reform, drug pricing measures and other prospective legislative initiatives could adversely affect our business.***

The United States and some foreign jurisdictions are considering a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. The business and financial condition of pharmaceutical and biotechnology companies may be affected by the efforts of government and third-party payors to contain or reduce the costs of health care and to lower drug prices. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives, including the Inflation Reduction Act, enacted in 2022. We expect that there will continue to be a number of federal and state proposals to implement additional government controls over the pricing of prescription pharmaceuticals. In addition, increasing emphasis on reducing the cost of health care in the United States will continue to put pressure on the pricing and reimbursement of prescription pharmaceuticals.

The heightened governmental scrutiny over pharmaceutical pricing practices has resulted in several Congressional hearings and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. For example, in July 2021, the Biden administration released an executive order, “Promoting Competition in the American Economy,” with multiple provisions aimed at prescription drugs. In response to Biden’s executive order, on September 9, 2021, 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 advance these principles. In response to the Biden administration’s October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the Center for Medicare and Medicaid Innovation which will be evaluated on their ability to lower the cost of drugs, promote accessibility, and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future.

We are currently unable to predict what other additional legislation or regulation, if any, relating to the health care industry may be enacted in the future or what effect recently enacted federal legislation or any such additional legislation or regulation would have on our business. The pendency or approval of such proposals or reforms could result in a decrease in our stock price or limit our ability to raise capital or to enter into collaboration agreements for the further development and commercialization of our programs and products.

****Any relationships with healthcare professionals, principal investigators, consultants, customers (actual and potential) and third-party payors in connection with our current and future business activities are and will continue to be subject, directly or indirectly, to federal and state healthcare laws. If we are unable to comply, or have not fully complied, with such laws, we could face penalties, contractual damages, reputational harm, diminished profits and future earnings and curtailment or restructuring of our operations.***

Our business operations and activities may be directly, or indirectly, subject to various federal and state healthcare laws, including without limitation, fraud and abuse laws, false claims laws, data privacy and security laws, as well as transparency laws regarding payments or other items of value provided to healthcare providers. These laws may restrict or prohibit a wide range of business activities, including, but not limited to, research, manufacturing, distribution, pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. These laws may impact, among other things, our current activities with principal investigators and research subjects, as well as current and future sales, marketing, patient co-payment assistance and education programs.

Such laws include:

- the federal Anti-Kickback Statute which prohibits, among other things, persons and entities from 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, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- the federal civil and criminal false claims laws, including the federal civil False Claims Act, and Civil Monetary Penalties Laws, which impose criminal and civil penalties against individuals or entities for, among other things, 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 Health Insurance Portability and Accountability Act, or HIPAA, which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its (HITECH) implementing regulations, which also imposes obligations, including mandatory contractual terms, on covered entities, including certain healthcare providers, health plans and healthcare clearinghouses, as well as their business associates and their covered subcontractors, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program, with specific exceptions, to report annually to CMS information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare professionals (such as physician assistants and nurse practitioners) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians and their immediate family members; and
- analogous state, local 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 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; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures or drug pricing; state laws that require disclosure of price increases above certain identified thresholds as well as of new commercial launches in the state; state laws that create Prescription Drug Price Affordability Boards to review or attempt to cap drug spending; state and local laws that require the registration of pharmaceutical sales representatives; state and local “drug take back” laws and regulations; and state and foreign laws governing the privacy and security of health information in some 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 will comply with applicable healthcare laws may involve substantial costs. While our interactions with healthcare professionals, including our speaker programs and other arrangements have been structured to comply with these laws and related guidance, it is possible that governmental and enforcement 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. For example, we maintain a patient assistance program to help eligible patients afford our products. These types of programs have become the subject of governmental scrutiny, and numerous organizations, including pharmaceutical manufacturers, have been subject to litigation, enforcement actions and settlements related to their patient assistance programs. If our operations or activities are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to, without limitation, significant civil, criminal and administrative penalties, damages, monetary fines, disgorgement, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate.

In addition, any sales of our product once commercialized outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

We could face liability if a regulatory authority determines that we are promoting INGREZZA, ONGENTYS or any of our product candidates that receives regulatory approval, for “off-label” uses.

A company may not promote “off-label” uses for its drug products. An off-label use is the use of a product for an indication that is not described in the product’s FDA-approved label in the United States or for uses in other jurisdictions that differ from those approved by the applicable regulatory agencies. Physicians, on the other hand, may prescribe products for off-label uses. Although the FDA and other regulatory agencies do not regulate a physician’s choice of drug treatment made in the physician’s independent medical judgment, they do restrict promotional communications from companies or their sales force with respect to off-label uses of products for which marketing clearance has not been issued. However, companies may share truthful and not misleading information that is otherwise consistent with a product’s FDA approved labeling. A company that is found to have promoted off-label use of its product may be subject to significant liability, including civil and criminal sanctions. We intend to comply with the requirements and restrictions of the FDA and other regulatory agencies with respect to our promotion of our products, including INGREZZA and ONGENTYS, but we cannot be sure that the FDA or other regulatory agencies will agree that we have not violated their restrictions. As a result, we may be subject to criminal and civil liability. In addition, our management’s attention could be diverted to handle any such alleged violations.

If the FDA or any other governmental agency initiates an enforcement action against us, or if we are the subject of a *qui tam* suit brought by a private plaintiff on behalf of the government, and it is determined that we violated prohibitions relating to the promotion of products for unapproved uses, we could be subject to substantial civil or criminal fines or damage awards and other sanctions such as consent decrees and corporate integrity agreements pursuant to which our activities would be subject to ongoing scrutiny and monitoring to ensure compliance with applicable laws and regulations. Any such fines, awards or other sanctions would have an adverse effect on our revenue, business, financial prospects and reputation.

****If our information technology systems or data is or were compromised, we could experience adverse impacts resulting from such compromise, including, but not limited to, interruptions to our operations such as our clinical trials, claims that we breached our data protection obligations, harm to our reputation, and a loss of customers or sales.***

We are increasingly dependent on information technology systems and infrastructure, including mobile technologies, to operate our business. In the ordinary course of our business, we collect, use, safeguard, share and transfer, or collectively, process, confidential and sensitive electronic information on our networks and in our data centers. This information includes, among other things, de-identified or pseudonymous sensitive personal data (including health data), our intellectual property and proprietary information, the confidential information of our collaborators and licensees, and the personal data of our employees. It is important to our operations and business strategy that this electronic information remains secure and is perceived to be secure. The size and complexity of our information technology systems, and those of third-party vendors with whom we contract, and the volume of data we retain, make such systems potentially vulnerable to breakdown, malicious intrusion, security breaches, ransomware attacks, social engineering attacks, supply-chain attacks, and other cyber-attacks. Cyber-attacks, malicious internet-based activity, online and offline fraud, and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties upon which we rely. Such threats continue to rise, are increasingly difficult to detect, and come from a variety of sources, including traditional computer “hackers,” threat actors, “hacktivists,” organized criminal threat actors, personnel (such as through theft or misuse), sophisticated nation states, and nation-state-supported actors. Some actors now engage and are expected to continue to engage in cyber-attacks, including without limitation nation-state actors for geopolitical reasons and in conjunction with military conflicts and defense activities. During times of war and other major conflicts, we and the third parties upon which we rely may be vulnerable to a heightened risk of these attacks, including retaliatory cyber-attacks, that could materially disrupt our systems and operations, as well as our ability to conduct clinical trials. Ransomware attacks are also becoming increasingly prevalent and severe, and can lead to significant interruptions in our operations, loss of sensitive data and income, reputational harm, and diversion of funds. To alleviate the financial, operational and reputational impact of a ransomware attack, it may be preferable to make extortion payments, but we may be unwilling or unable to do so (including, for example, if applicable laws or regulations prohibit such payments). Similarly, supply chain attacks have increased in frequency and severity, and we cannot guarantee that third parties in our supply chain have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our information technology systems and infrastructure or the information technology systems and infrastructure of third parties that support our operations. Furthermore, if the COVID-19 or another future pandemic requires us to reinstate a remote workforce model, our information technology systems and data will be at increased risk as more of our employees work from home, utilizing network connections outside our premises.

Additionally, natural disasters, public health pandemics or epidemics (including, for example, the COVID-19 pandemic), terrorism, war and geopolitical conflicts (including, for example, the conflict between Russia and Ukraine) and telecommunication and electrical failures may result in damage to or the interruption or impairment of key business processes, or the loss or corruption of confidential information, including intellectual property, proprietary business information and personal data. Information security risks have significantly increased in recent years in part due to the proliferation of new technologies and the increased sophistication and activities of organized crime, hackers, terrorists and other external parties, including foreign private parties and state actors.

As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. Our efforts to identify and remediate such vulnerabilities may not be successful and we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities. Further, we may be unable to detect such vulnerabilities in the future because such threats and techniques change frequently, are often sophisticated in nature and may not be detected until after a security breach has occurred.

We may rely on third-party service providers and technologies to operate critical business systems to process sensitive information in a variety of contexts, including, without limitation, cloud-based infrastructure, data center facilities, encryption and authentication technology, employee email and other functions. We may also rely on third-party service providers to provide other products, services, parts, or otherwise to operate our business, including clinical trial sites and investigators, contractors, manufacturers, suppliers and consultants. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If our third-party service providers or CROs experience a security incident or other interruption, we could experience adverse consequences. While we may be entitled to damages if our third-party service providers fail to satisfy their privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award.

Although to our knowledge we, or the third parties upon whom we rely, have not experienced any incident or disruption to date that is material to us, we and our vendors have been, either directly or indirectly, the target of cybersecurity incidents and expect them to continue. While we have implemented security measures to protect our data security and information technology systems, such measures may not prevent such events. Furthermore, while we have implemented and are planning to implement redundancies to avoid interruptions to our operations, not all potential events can be anticipated and interruptions to our operations could lead to decreased productivity. The cyber threat landscape is continually changing, and we will continue to adapt and change our cyber program to manage and mitigate associated risks.

If we (or a third party upon whom we rely) experience a security breach, ransomware attack or are perceived to have experienced a security breach, we may experience adverse consequences. Such consequences may include: government enforcement actions (for example, investigations, fines, penalties, audits and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims); indemnification obligations; negative publicity; reputational harm (including but not limited to damage to our patient, partner, or employee relationships); monetary fund diversions; interruptions in our operations (including availability of data, loss of connectivity to our network or internet); financial loss (including decreased productivity resulting from interruptions in our operations); and other similar harms. Similarly, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, theft of our intellectual property or proprietary business information could require substantial expenditures to remedy. Applicable data privacy and security obligations may also require us to notify relevant stakeholders of security breaches or incidents. Such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences.

Our contracts, with for example third parties or CROs, 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 liabilities, damages, or claims related to our data privacy and security obligations. We also cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or to mitigate liabilities arising out of our privacy and security practices, that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

If we fail to obtain or maintain orphan drug designation or other regulatory exclusivity for some of our product candidates, our competitive position would be harmed.

In addition to any patent protection, we rely on forms of regulatory exclusivity to protect our products such as orphan drug designation. A product candidate that receives orphan drug designation can benefit from a streamlined regulatory process as well as potential commercial benefits following approval. Currently, this designation provides market exclusivity in the United States for seven years and the European Union for 10 years if a product is the first such product approved for such orphan indication. This market exclusivity does not, however, pertain to indications other than those for which the drug was specifically designated in the approval, nor does it prevent other types of drugs from receiving orphan designations or approvals in these same indications. Further, even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the new drug is clinically superior to the orphan product or a market shortage occurs.

In the European Union, orphan exclusivity may be reduced to 6 years if the drug no longer satisfies the original designation criteria or can be lost altogether if the marketing authorization holder consents to a second orphan drug application or cannot supply enough drug, or when a second applicant demonstrates its drug is "clinically superior" to the original orphan drug.

If we do not have adequate patent protection for our products, then the relative importance of obtaining regulatory exclusivity is even greater. We may not be successful obtaining orphan drug designations for any indications and, even if we succeed, such product candidates with such orphan drug designations may fail to achieve FDA approval. Even if a product candidate with orphan drug designation may receive marketing approval from the FDA, it may fail to result in or maintain orphan drug exclusivity upon approval, which would harm our competitive position.

The technologies we use in our research as well as the drug targets we select may infringe the patents or violate the proprietary rights of third parties.

We cannot assure you that third parties will not assert patent or other intellectual property infringement claims against us or our collaborators with respect to technologies used in potential products. If a patent infringement suit were brought against us or our collaborators, we or our collaborators could be forced to stop or delay developing, manufacturing or selling potential products that are claimed to infringe a third party's intellectual property unless that party grants us or our collaborators rights to use its intellectual property. In such cases, we could be required to obtain licenses to patents or proprietary rights of others in order to continue to commercialize our products. However, we may not be able to obtain any licenses required under any patents or proprietary rights of third parties on acceptable terms, or at all. Even if our collaborators or we were able to obtain rights to the third party's intellectual property, these rights may be non-exclusive, thereby giving our competitors access to the same intellectual property. Ultimately, we may be unable to commercialize some of our potential products or may have to cease some of our business operations as a result of patent infringement claims, which could severely harm our business.

Our business operations may subject us to disputes, claims and lawsuits, which may be costly and time-consuming and could materially and adversely impact our financial position and results of operations.

From time to time, we may become involved in disputes, claims and lawsuits relating to our business operations. In particular, we may face claims related to the safety of our products, intellectual property matters, employment matters, tax matters, commercial disputes, competition, sales and marketing practices, environmental matters, personal injury, insurance coverage and acquisition or divestiture-related matters. Any dispute, claim or lawsuit may divert management's attention away from our business, we may incur significant expenses in addressing or defending any dispute, claim or lawsuit, and we may be required to pay damage awards or settlements or become subject to equitable remedies that could adversely affect our operations and financial results. For example, we are currently engaged in various intellectual property litigation matters against potential competitors related to INGREZZA. Refer to Item 1. Legal Proceedings for a more detailed description of these matters.

Litigation related to these disputes may be costly and time-consuming and could materially and adversely impact our financial position and results of operations if resolved against us. In addition, the uncertainty associated with litigation could lead to increased volatility in our stock price.

Our employees, independent contractors, principal investigators, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees and independent contractors, such as principal investigators, consultants, commercial partners and vendors, or by employees of our commercial partners could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws, to report financial information or data accurately, to maintain the confidentiality of our trade secrets or the trade secrets of our commercial partners, or to disclose unauthorized activities to us. In particular, sales, marketing and other business arrangements in the healthcare industry are subject to extensive laws intended to prevent fraud, kickbacks, self-dealing and other abusive practices. Employee and independent contractor misconduct could also involve the improper use of individually identifiable information, including, without limitation, information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. Any action against our employees, independent contractors, principal investigators, consultants, commercial partners or vendors for violations of these laws could result in significant civil, criminal and administrative penalties, fines and imprisonment.

****We face potential product liability exposure far in excess of our insurance coverage.***

The use of any of our potential products in clinical trials, and the sale of any approved products, including INGREZZA and ONGENTYS, may expose us to liability claims. These claims might be made directly by consumers, health care providers, pharmaceutical companies or others selling our products. We have product liability insurance coverage for both our clinical trials as well as related to the sale of INGREZZA and ONGENTYS in amounts consistent with customary industry practices. However, our insurance may not reimburse us or may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability from any current or future clinical trials or approved products. A successful product liability claim, or series of claims, brought against us would decrease our cash reserves and could cause our stock price to fall. Furthermore, regardless of the eventual outcome of a product liability claim, any product liability claim against us may decrease demand for our approved products, including INGREZZA and ONGENTYS, damage our reputation, result in regulatory investigations that could require costly recalls or product modifications, cause clinical trial participants to withdraw, result in costs to defend the related litigation, decrease our revenue, and divert management's attention from managing our business.

Our activities involve hazardous materials, and we may be liable for any resulting contamination or injuries.

Our research activities involve the controlled use of hazardous materials. We cannot eliminate the risk of accidental contamination or injury from these materials. If an accident occurs, a court may hold us liable for any resulting damages, which may harm our results of operations and cause us to use a substantial portion of our cash reserves, which would force us to seek additional financing.

We are subject to stringent and changing obligations related to data privacy and information security. Our actual or perceived failure to comply with such obligations could have a material adverse effect on our reputation, business, financial condition or results of operations.

In the ordinary course of our business, we collect, receive, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, processing) confidential and sensitive information, including personal data, proprietary and confidential business data, trade secrets, intellectual property, data we collect about clinical trial participants in connection with clinical trials, and sensitive third-party data, on our networks and in our data centers. We are subject to numerous federal, state, local and foreign laws, orders, codes, regulations and regulatory guidance regarding privacy, data protection, information security and the processing of personal information (including clinical trial data), the number and scope of which are expanding, changing, subject to differing applications and interpretations, and may be inconsistent among jurisdictions. Our data processing activities may also subject us to other data privacy and security obligations, such as industry standards, external and internal privacy and security policies, contracts and other obligations that govern the processing of data by us and by third parties on our behalf.

Laws regarding privacy, data protection, information security and the processing of personal data are becoming increasingly common in the United States at both the federal and state level. For example, the California Consumer Privacy Act, or CCPA, which went into effect in 2020, imposes obligations on businesses to which it applies. These obligations include, without limitation, providing specific disclosures in privacy notices, affording California residents certain rights related to their personal data, and requiring businesses subject to the CCPA to implement certain measures to effectuate California residents' personal data rights. The CCPA allows for statutory fines for noncompliance (up to \$7,500 per violation). In addition, the California Privacy Rights Act of 2020, or the CPRA, which became effective January 1, 2023, expands the CCPA by establishing a new California Privacy Protection Agency to implement and enforce the CCPA (as amended), which could increase the risk of an enforcement action. Other states have also enacted data privacy laws. For example, Virginia passed its Consumer Data Protection Act, Colorado passed the Colorado Privacy Act, and Utah passed the Utah Consumer Privacy Act, all of which become effective in 2023. Similar laws are being considered in several other states, as well as at the federal and local levels. These developments may further complicate compliance efforts, and may increase legal risk and compliance costs for us and the third parties upon whom we rely.

Additionally, the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH"), imposes specific requirements relating to the privacy, security, and transmission of individually identifiable health information.

Laws in Europe regarding privacy, data protection, information security and the processing of personal data have also been significantly reformed and continue to undergo reform. For example, the European Union's General Data Protection Regulation, or the EU GDPR, and the United Kingdom's GDPR, or the UK GDPR, impose strict requirements for processing the personal data of individuals located, respectively, within the European Economic Area, or EEA, and the United Kingdom, or the UK. The EU GDPR and the UK GDPR enhance data protection obligations for processors and controllers of personal data, including, for example, obligations relating to: processing health and other sensitive data; obtaining consent of individuals; providing notice to individuals regarding data processing activities; responding to data subject requests; taking certain measures when engaging third-party processors; notifying data subjects and regulators of data breaches; and implementing safeguards to protect the security and confidentiality of personal data. The EU GDPR and the UK GDPR impose substantial fines for breaches of data protection requirements. For example, under the EU GDPR, such fines can be up to four percent of global revenue or 20 million euros, whichever is greater, and also allow for private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. The EU GDPR, the UK GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as EU regulations governing clinical trial data and other healthcare data, could require us to change our business practices or lead to government enforcement actions, private litigation or significant penalties against us and could have a material adverse effect on our business, financial condition or results of operations.

We may be subject to additional foreign data laws. For example, in Canada, the Personal Information Protection and Electronic Documents Act ("PIPEDA") and various related provincial laws, as well as Canada's Anti-Spam Legislation ("CASL"), may apply to our operations. As another example, the General Data Protection Law (Lei Geral de Proteção de Dados Pessoais, or "LGPD") (Law No. 13,709/2018) may apply to our operations. The LGPD broadly regulates processing personal data of individuals in Brazil and imposes compliance obligations and penalties comparable to those of the EU GDPR. We also target customers in Asia and may be subject to new and emerging data privacy regimes in Asia, including Japan's Act on the Protection of Personal Information and Singapore's Personal Data Protection Act.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Certain jurisdictions have enacted data localization laws and cross-border personal data transfers laws. For example, absent appropriate safeguards or other circumstances, the EU GDPR may restrict the transfer of personal data to countries outside of the EEA, such as the United States, which the European Commission does not consider to provide an adequate level of personal data protection. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA and UK's standard contractual clauses, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If we cannot implement a valid compliance mechanism for cross-border personal data transfers, we may face increased exposure to regulatory actions, substantial fines and injunctions against processing or transferring personal data from Europe or elsewhere. The inability to import personal data to the United States may significantly and negatively impact our business operations, including by limiting our ability to conduct clinical trial activities in Europe and elsewhere; limiting our ability to collaborate with parties subject to European and other data protection laws or requiring us to increase our personal data processing capabilities in Europe and/or elsewhere at significant expense. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws.

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 among jurisdictions or in conflict. 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 those of any third parties that process personal data on our behalf. In addition, these obligations may even require us to change to our business model.

Although we endeavor to comply with all 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 such obligations that impacts our compliance posture. If we fail, or are perceived to have failed, to address or comply with data privacy and security obligations, we could face significant consequences. These consequences may include, but are not limited to, government enforcement actions, litigation, additional reporting requirements and/or oversight, bans on processing personal data, imprisonment of company officials, and orders to destroy or not use personal data. Any of these events could have a material adverse effect on our reputation, business, financial condition or results of operations.

Item 5. Other Information

During the period from April 1, 2023, to June 30, 2023, our executive officers and directors adopted or terminated contracts, instructions or written plans for the purchase or sale of our securities as noted below:

Name and Title	Action	Date	Trading Arrangement		Total Shares Authorized to be Sold	Expiration Date
			Rule 10b5-1*	Non-Rule 10b5-1**		
David W. Boyer (Chief Corporate Affairs Officer)	Adopt	5/31/2023	X		11,590	2/15/2024
William H. Rastetter (Chair of the Board of Directors)	Adopt	5/31/2023	X		10,900 plus the Additional Sell to Cover Shares (as defined in footnote 1)	2/15/2024

* Intended to satisfy the affirmative defense of Rule 10b5-1(c)

** Not intended to satisfy the affirmative defense of Rule 10b5-1(c)

(1) Dr. Rastetter's plan provides for the exercise of a vested stock option to purchase 20,000 shares (the "Vested Option") and the associated sale of 10,900 shares plus an additional number of shares as reasonably estimated by a brokerage firm such that the net proceeds from all shares sold are sufficient to cover the exercise cost and taxes associated with the exercise of the Vested Option (the "Additional Sell to Cover Shares").

Item 6. Exhibits

The following exhibits are filed as part of, or incorporated by reference into, this report:

Exhibit

3.1	Description:	Certificate of Incorporation, as amended
	Reference:	Incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed on November 5, 2018
3.2	Description:	Bylaws, as amended
4.1	Description:	Form of Common Stock Certificate
	Reference:	Incorporated by reference to the Company's Registration Statement on Form S-1 (Registration No. 333-03172)
4.2	Description:	Indenture, dated as of May 2, 2017, by and between the Company and U.S. Bank National Association, as Trustee
	Reference:	Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on May 2, 2017
4.3	Description:	First Supplemental Indenture, dated as of December 22, 2021, by and between the Company and U.S. Bank National Association, as Trustee
	Reference:	Incorporated by reference to Exhibit 4.3 of the Company's Annual Report on Form 10-K filed on February 11, 2022
4.4	Description:	Form of Note representing the Company's 2.25% Convertible Notes due 2024
	Reference:	Incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on May 2, 2017
101.+	Description:	Neurocrine Biosciences, Inc. 2020 Equity Incentive Plan, as amended and restated
31.1	Description:	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
31.2	Description:	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934
32*	Description:	Certifications 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	Description:	Inline XBRL Instance Document. – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Description:	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Description:	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Description:	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Description:	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Description:	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Description:	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibit 101)

+ Management contract or compensatory plan or arrangement.

* These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of Neurocrine Biosciences, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Except as specifically noted above, the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K have a Commission File Number of 000-22705.

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.

NEUROCRINE BIOSCIENCES, INC.

Dated: August 1, 2023

/s/ Matthew C. Abernethy

Matthew C. Abernethy

Chief Financial Officer

(Duly authorized officer and Principal Financial Officer)

BYLAWS
OF
NEUROCRINE BIOSCIENCES, INC.
(a Delaware corporation)

BYLAWS OF
NEUROCRINE BIOSCIENCES, INC.
(a Delaware corporation)

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BYLAWS
OF
NEUROCRINE BIOSCIENCES, INC.
(a Delaware corporation)

ARTICLE I

CORPORATE OFFICES

1.1 REGISTERED OFFICE

The registered office of the corporation shall be in the State of Delaware at such location and with such registered agent in charge thereof as may be established by the board of directors from time to time.

1.2 OTHER OFFICES

The board of directors may at any time establish branch or subordinate offices at any place or places where the corporation is qualified to do business.

ARTICLE II

MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at any place within or outside the State of Delaware designated by the board of directors. In the absence of any such designation, stockholders' meetings shall be held at the principal executive office of the corporation. The board of directors may, in its sole discretion, determine that any meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as provided under the General Corporation Law of Delaware ("DGCL").

2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held each year on a date and at a time designated by the board of directors. In the absence of such designation, the annual meeting of stockholders shall be held on the third Tuesday in May in each year at 10:00 a.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day. At the meeting, directors shall be elected, and any other proper business may be transacted. Only such business shall be conducted as is a proper matter for stockholder action under Delaware law and as shall have been properly brought before the meeting.

2.3 SPECIAL MEETING

A special meeting of the stockholders may be called at any time by the board of directors,

or by the chairman of the board, or by the president, or by one or more stockholders holding shares in the aggregate entitled to cast more than ten percent (10%) of the votes at that meeting. No other person or persons are permitted to call a special meeting.

If a special meeting is called by any person or persons other than the board of directors, then the request shall be in writing, specifying the time of such meeting and the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile transmission to the chairman of the board, the president, or the secretary of the corporation. The officer receiving the request shall cause notice to be promptly given to the stockholders entitled to vote, in accordance with the provisions of Sections 2.4 and 2.6 of these bylaws, that a meeting will be held at the time requested by the person or persons calling the meeting, so long as that time is not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after receipt of the request, then the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing or affecting the time when a meeting of stockholders called by action of the board of directors may be held.

2.4 NOTICE OF STOCKHOLDERS' MEETINGS

All notices of meetings of stockholders shall be sent or otherwise given in accordance with Section 2.6 of these bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting. The notice shall specify the place, date and hour of the meeting and (i) in the case of a special meeting, the purpose or purposes for which the meeting is called (no business other than that specified in the notice may be transacted) or (ii) in the case of the annual meeting, those matters which the board of directors, at the time of giving the notice, intends to present for action by the stockholders (but any proper matter may be presented at the meeting for such action). The notice of any meeting at which directors are to be elected shall include the name of any nominee or nominees who, at the time of the notice, the board intends to present for election.

2.5 ADVANCE NOTICE OF STOCKHOLDER NOMINEES AND STOCKHOLDER BUSINESS

Subject to the rights of holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation,

- (a) nominations for the election of directors, and
- (b) business proposed to be brought before any stockholder meeting

may be made by the board of directors or proxy committee appointed by the board of directors or by any stockholder entitled to vote in the election of directors generally if such nomination or business proposed is otherwise proper business before such meeting. However, any such stockholder may nominate one or more persons for election as directors at a meeting or propose business to be brought before a meeting, or both, only if such stockholder has given timely notice in proper written form of their intent to make such nomination or nominations or to propose such

2.

business. To be timely, such stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation not less than one hundred twenty (120) calendar days in advance of the date specified in the corporation's proxy statement released to stockholders in connection with the previous year's annual meeting of stockholders; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date contemplated at the time of the previous year's proxy statement, notice by the stockholder to be timely must be so received a reasonable time before the solicitation is made. To be in proper form, a stockholder's notice to the secretary shall set forth:

- (i) the name and address of the stockholder who intends to make the nominations or propose the business and, as the case may be, of the person or persons to be

nominations or propose the business and, as the case may be, of the person or persons to be nominated or of the business to be proposed;

(ii) a representation that the stockholder is a holder of record of stock of the corporation entitled to vote at such meeting and, if applicable, intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice;

(iii) if applicable, a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the stockholder;

(iv) such other information regarding each nominee or each matter of business to be proposed by such stockholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission had the nominee been nominated, or intended to be nominated, or the matter been proposed, or intended to be proposed by the board of directors; and

(v) if applicable, the consent of each nominee to serve as director of the corporation if so elected.

The chairman of the meeting shall refuse to acknowledge the nomination of any person or the proposal of any business not made in compliance with the foregoing procedure.

2.6 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE

Except as otherwise required by law, notice may be given in writing directed to a stockholder's mailing address as it appears on the records of the corporation and shall be given: (a) if mailed, when notice is deposited in the U.S. mail, postage prepaid; and (b) if delivered by courier service, the earlier of when the notice is received or left at such stockholder's address. So long as the corporation is subject to the proxy rules set forth in Regulation 14A under the 1934 Act, notice shall be given in the manner required by such rules. To the extent permitted by such rules, or if the corporation is not subject to Regulation 14A, notice may be given by electronic transmission directed to the stockholder's electronic mail address, and if so given, shall be given when directed to such stockholder's electronic mail address unless the stockholder has notified the corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or such notice is prohibited by Section 232(e) of the DGCL. If notice is given by electronic mail, such notice shall comply with the applicable provisions of Section 232 of the

3.

DGCL. Notice may be given by other forms of electronic transmission with the consent of a stockholder in the manner permitted by Section 232(b) of the DGCL and shall be deemed given as provided therein.

An affidavit of the mailing or other means of giving any notice of any stockholders' meeting, executed by the secretary, assistant secretary or any transfer agent of the corporation giving the notice, shall, in the absence of fraud, be prima facie evidence of the giving of such notice.

2.7 ADDITIONAL REQUIREMENTS AS TO NOTICE OF STOCKHOLDER NOMINEES AND STOCKHOLDER BUSINESS

(a) In addition to the requirements set forth in Section 2.5, and to the extent not already required by Section 2.5, the written notice required by Section 2.5 shall set include, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made, including any person who is a member of a "group" (as such term is used in Rule 13d-5 promulgated under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "1934 Act")) with any such stockholder or beneficial owner with respect to the stock of the corporation)(each, a "Proponent" and collectively, the "Proponents"): a statement (i) whether or not any Proponent will engage in a

solicitation within the meaning of Rule 14a-1(l) under the 1934 Act with respect to the nomination or business proposal and, if so, the name of each participant (as defined in Item 4 of Schedule 14A under the 1934 Act) in such solicitation and the amount of the cost of the solicitation that has been and will be borne (directly or indirectly) by each participant in such solicitation, (ii) whether such person or group, in the case of a proposal of business other than nominations, will deliver a proxy statement and form of proxy (through means satisfying each of the conditions that would be applicable to the corporation under either Rule 14a-16(a) or Rule 14a-16(n) under the 1934 Act) to holders (including beneficial owners pursuant to Rule 14b-1 and Rule 14b-2 under the 1934 Act) of at least the percentage of voting power of all of the shares of capital stock of the corporation required under applicable law to carry the business proposal (if applicable), (iii) confirming that such person or group, in the case of any nomination (except for a nomination made by an Eligible Stockholder pursuant to Section 2.8), will solicit the holders of at least 67% of the voting power of the corporation's stock entitled to vote generally in the election of directors in support of director nominees other than the corporation's nominees, and (iv) whether any such person or group intends to otherwise solicit proxies from stockholders in support of a proposal or nomination.

(b) A stockholder providing written notice required by Section 2.5 shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the date that is five (5) business days prior to the meeting and, in the event of any adjournment, recess or postponement thereof, five (5) business days prior to such adjourned, recessed or postponed meeting; provided, that no such update or supplement shall cure or affect the accuracy (or inaccuracy) of any representations made by any Proponent, any of its affiliates or associates, or a nominee or the validity (or invalidity) of any nomination or proposal that failed to comply with Sections 2.5, 2.7 and 2.8 or is rendered invalid as a result of any inaccuracy therein. In the case of an update and supplement pursuant to clause (i) of this Section 2.7(b), such update and supplement shall be received by the secretary of the corporation at the principal executive

offices of the corporation not later than five (5) business days after the record date for the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 2.7(b), such update and supplement shall be received by the secretary of the corporation at the principal executive offices of the corporation not later than two (2) business days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two (2) business days prior to such adjourned or postponed meeting.

(c) To be eligible to be a nominee for election or re-election as a director of the corporation pursuant to a nomination by a stockholder under Section 2.5, Section 2.7(e) or Section 2.8, such proposed nominee or a person on such proposed nominee's behalf must deliver (in accordance with the time periods prescribed for delivery of notice under Section 2.5, 2.7(e) or 2.8, as applicable) to the secretary of the corporation at the principal executive offices of the corporation, a written questionnaire with respect to the background, qualification, stock ownership and independence of such proposed nominee and the background of any other person or entity on whose behalf the nomination is being made (which questionnaire shall be provided by the secretary of the corporation within ten (10) days following a written request therefor by a record stockholder) and a written representation and agreement (in the form provided by the secretary of the corporation upon written request) that such person (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the corporation, will act or vote on any issue or question (a "Voting Commitment") that has not been disclosed to the corporation in the questionnaire or (B) any Voting Commitment that could limit or interfere with such person's ability to comply, if elected as a director of the corporation, with such person's fiduciary duties under applicable law, (ii) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director of the corporation or a nominee that has not been disclosed therein, (iii) in such person's individual capacity and on behalf of any person or entity on whose behalf the nomination is being made, would be in compliance, if elected as a director of the corporation, and will comply with, all applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the corporation, as well as any applicable law, rule or regulation or listing requirement, and (iv) if elected as director of the corporation, intends to serve the entire term until the next meeting at which such candidate would face re-election.

(d) A person shall not be eligible for election or re-election as a director unless the person is nominated either in accordance with Section 2.5 or Section 2.7(e) and the applicable provisions of Section 2.7 are satisfied. Notwithstanding anything to the contrary in these bylaws, unless otherwise required by applicable law, if any Proponent (i) provides notice pursuant to Rule 14a-19(b) promulgated under the 1934 Act with respect to any proposed nominee and (ii) subsequently (x) fails to comply with the requirements of Rule 14a-19 promulgated under the 1934 Act (or fails to timely provide reasonable evidence sufficient to satisfy the corporation that such Proponent has met the requirements of Rule 14a-19(a)(3) promulgated under the 1934 Act in accordance with the following sentence) or (y) fails to inform the corporation that they no longer plan to solicit proxies in accordance with the requirements of Rule 14a-19 under the 1934 Act by delivering a written notice to the secretary of the corporation at the principal executive offices of the corporation within two (2) business days after the occurrence of such change, then the

nomination of each such proposed nominee shall be disregarded (and such nominee disqualified), notwithstanding that the nominee is included as a nominee in the corporation's proxy statement, notice of meeting or other proxy materials for any annual meeting (or any supplement thereto) and

notwithstanding that proxies or votes in respect of the election of such proposed nominees may have been received by the corporation (which proxies and votes shall be disregarded). If any Proponent provides notice pursuant to Rule 14a-19(b) promulgated under the 1934 Act, such Proponent shall deliver to the corporation, no later than five (5) business days prior to the applicable meeting, reasonable evidence that it has met the requirements of Rule 14a-19(a)(3) promulgated under the 1934 Act. Notwithstanding anything to the contrary set forth herein, and for the avoidance of doubt, the nomination of any person whose name is included as a nominee in the corporation's proxy statement, notice of meeting or other proxy materials for any annual meeting (or any supplement thereto) as a result of any notice provided by any Proponent pursuant to Rule 14a-19(b) promulgated under the 1934 Act with respect to such proposed nominee and whose nomination is not made by or at the direction of the board of directors or any authorized committee thereof shall not be deemed to have been made pursuant to the corporation's notice of meeting (or any supplement thereto) and any such nominee may only be nominated by a stockholder of the corporation pursuant to Section 2.5.

(e) Special Meetings. No business may be transacted at a special meeting otherwise than specified in the notice of meeting. Nominations of persons for election to the board of directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the board of directors (or an authorized committee thereof), (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers written notice to the secretary of the corporation setting forth the information required by Section 2.5 or (iii) in the case of a stockholder-requested special meeting, by any stockholder pursuant to Section 2.3. In the event the corporation calls a special meeting of stockholders (other than a stockholder-requested special meeting) for the purpose of electing one or more directors to the board of directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Section 2.5 of these bylaws shall be received by the secretary at the principal executive offices of the corporation not later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 2.7(b). In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above. Notwithstanding the foregoing provisions of this Section 2.7(e), a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 2.7(e), and any violation thereof shall be deemed violation of these bylaws. The number of nominees a stockholder may nominate for election at the special meeting (or in the case of a stockholder giving the notice on behalf of a beneficial owner, the number of nominees a stockholder may nominate for election at the special meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such special meeting. Notwithstanding any other provision of these bylaws, in the case of a stockholder-requested special meeting, no stockholder may nominate a person for

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election to the board of directors or propose any other business to be considered at the meeting, except pursuant to the written request(s) delivered for such special meeting pursuant to Section 2.3.

2.8 PROXY ACCESS FOR DIRECTOR NOMINATIONS

(a) *Nominees to be Included in the Corporation's Proxy Statement.* Whenever the board of directors solicits proxies with respect to the election of directors at an annual meeting of stockholders, the corporation shall include in its proxy statement or on its form of proxy, voting instruction form and ballot, as applicable (collectively, its "proxy materials") for an annual meeting of stockholders the name, together, in the case of the proxy statement, with the Required Information (as defined below), of any person nominated for election (a "Proxy Access Nominee")

information (as defined below), or any person nominated for election (a "Proxy Access Nominee") to the board of directors by a stockholder that satisfies, or by a group of no more than twenty (20) stockholders that satisfy, the requirements of this Section 2.8 (such stockholder or group of stockholders being an "Eligible Stockholder") and that expressly elects at the time of providing the notice required by this Section 2.8 (the "Proxy Access Notice") to have its nominee included in the corporation's proxy materials pursuant to this Section 2.8. The "Required Information" that the corporation will include in its proxy statement is (A) the information concerning the Proxy Access Nominee and the Eligible Stockholder that is required to be disclosed in the corporation's proxy statement by the regulations promulgated under the 1934 Act, and (B) if the Eligible Stockholder so elects, a written statement, not to exceed five hundred (500) words, in support of the Proxy Access Nominee's candidacy (the "Statement"). To be timely, the Required Information must be received by the secretary of the corporation within the time period specified in this Section 2.8 for providing the Proxy Access Notice. Notwithstanding anything to the contrary contained in this Section 2.8, the corporation may omit from its proxy materials any information or Statement (or portion thereof) that it, in good faith, believes (A) is materially false or misleading or omits to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, (B) would violate any applicable law, regulation or listing standard, or (C) directly or indirectly impugns the character, integrity or personal reputation of, or directly or indirectly makes charges concerning improper, illegal or immoral conduct or association, without factual foundation, with respect to any person. Nothing in this Section 2.8 shall limit the corporation's ability to solicit against and include in its proxy materials or any other soliciting materials its own statements relating to any Eligible Stockholder or Proxy Access Nominee.

(b) Notice Period. To be timely, a stockholder's Proxy Access Notice must be received by the secretary of the corporation at the principal executive offices of the corporation not later than the close of business on the one hundred twentieth (120th) day, nor earlier than the close of business on the one hundred fiftieth (150th) day, prior to the first anniversary of the date (as stated in the corporation's proxy materials) that the definitive proxy statement was first sent to stockholders in connection with the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than sixty (60) days after the anniversary of the preceding year's annual meeting or if no annual meeting was held in the preceding year, the Proxy Access Notice, to be timely, must be delivered not earlier than the close of business on the one hundred fiftieth (150th) day prior to such annual meeting and not later than the close of business on the later of the one hundred twentieth (120th) day prior to such annual meeting or the tenth (10th) day following the day on

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which public announcement of the date of such meeting is first made by the corporation. In no event shall the public announcement of an adjournment, recess or postponement of an annual meeting for which notice has already been given or for which a public announcement of the meeting date has as already been made commence a new time period (or extend any time period) for the giving of a Proxy Access Notice as described above.

(c) Permitted Number of Proxy Access Nominees. The maximum number of Proxy Access Nominees that may be included in the corporation's proxy materials with respect to an annual meeting of stockholders shall not exceed the greater of (A) two or (B) twenty percent (20%) of the number of directors in office as of the last day on which a Proxy Access Notice may be delivered pursuant to this Section 2.8, or if such amount is not a whole number, the closest whole number below twenty percent (20%); provided, however, for so long as the board of directors is divided into three classes pursuant to Section 3.4, then the maximum number of Proxy Access Nominees shall not exceed fifty percent (50%) of the number of directors in the class whose term expires at such annual meeting, or if such amount is not a whole number, the closest whole number below fifty percent (50%); provided, further, that the maximum number of Proxy Access Nominees shall be reduced by:

(i) any Proxy Access Nominees who were submitted by an Eligible Stockholder as nominations for inclusion in the corporation's proxy materials pursuant to this

Section 2.8 but are subsequently either withdrawn or nominated by the board of directors as nominees of the board of directors;

(ii) any nominees recommended or unopposed by the board of directors pursuant to an agreement, arrangement or other understanding with a stockholder or group of stockholders (other than any such agreement, arrangement or understanding entered into in connection with the acquisition of stock from the corporation by such stockholder or group of stockholders); and

(iii) any nominees who were previously elected to the board of directors as Proxy Access Nominees (or pursuant to an agreement, arrangement or other understanding with a stockholder or group of stockholders as set forth in (ii) above) at any of the preceding three (3) annual meetings and who are re-nominated for election at such annual meeting by the board of directors.

In the event that, for any reason, one or more vacancies occurs on the board of directors after the deadline for submitting a Proxy Access Notice but before the date of the annual meeting of stockholders, and the board of directors resolves to reduce the size of the board of directors in connection therewith, the maximum number of Proxy Access Nominees shall be calculated based on the number of directors as so reduced. In the event that the number of Proxy Access Nominees submitted by Eligible Stockholders pursuant to this Section 2.8 exceeds the maximum number allowed under this Section 2.8(c), each Eligible Stockholder will select one Proxy Access Nominee for inclusion in the corporation's proxy materials until the maximum number is reached, going in order of the number (largest to smallest) of shares of the capital stock of the corporation each Eligible Stockholder disclosed as owned in its Proxy Access Notice submitted to the corporation and confirmed by the corporation. If the maximum number is not reached after each Eligible Stockholder has selected one Proxy Access Nominee, this selection process shall continue as many

times as necessary, following the same order each time, until the maximum number is reached. Following such determination, if any Proxy Access Nominee who satisfies the eligibility requirements of this Section 2.8 is thereafter (y) nominated by the board of directors or (z) not included in the corporation's proxy materials or is not submitted for election as a director, in either case, as a result of the Eligible Stockholder becoming ineligible or withdrawing its nomination, the Proxy Access Nominee becoming unwilling or unable to serve on the board of directors or the Eligible Stockholder or the Proxy Access Nominee failing to comply with the provisions of this Section 2.8, no other nominee or nominees shall be included in the corporation's proxy materials or otherwise submitted for director election in substitution thereof pursuant to this Section 2.8.

(d) **Eligible Stockholder.** An Eligible Stockholder must have owned (as defined below) continuously for at least three (3) years that number of shares of capital stock as shall constitute 3% or more of the voting power of the outstanding capital stock of the corporation entitled to vote generally in the election of directors (the "Required Shares") as of both (A) a date within seven (7) days prior to the date of the Proxy Access Notice and (B) the record date for determining stockholders entitled to vote at the annual meeting, and must continue to own the Required Shares through the annual meeting date for which the Proxy Access Nominee is being proposed. For purposes of satisfying the foregoing ownership requirement under this Section 2.8, (A) the shares of the capital stock of the corporation owned by one or more stockholders, or by the person(s) who own(s) shares of the capital stock of the corporation and on whose behalf any stockholder is acting, may be aggregated, provided that the number of stockholders and other persons whose ownership of shares of capital stock of the corporation is aggregated for such purpose shall not exceed twenty (20), and (B) (i) group of funds under common investment and management control or under common management and funded primarily by the same employer or (ii) a "group of investment companies" as such term is defined in Section 12(d)(1)(G)(ii) of the Investment Company Act of 1940, as amended (two or more funds or a "group of investment companies" referred to under (B), collectively, a "Qualifying Fund") shall be treated as one stockholder or person for this purpose if such stockholder provides documentation reasonably satisfactory to the corporation that demonstrates satisfaction of such criteria. A record holder acting on behalf of one or more beneficial owners will not be counted separately as a stockholder with respect to the shares owned by beneficial owners on whose behalf such record holder has been directed in writing to act, but each such beneficial owner will be counted separately, subject to the other provisions of this Section 2.8(d), for purposes of determining the number of stockholders whose holdings may be considered as part of an Eligible Stockholder's holdings. No person may be a member of more than one group of persons constituting an Eligible Stockholder under this Section 2.8 and no shares may be attributed as owned by more than one person constituting an Eligible Stockholder under this Section 2.8. For the avoidance of doubt, if a group of stockholders (including a group of funds within a Qualifying Fund) aggregates ownership of shares in order to meet the 3% threshold under this Section 2.8, any and all requirements for an Eligible Stockholder under this Section 2.8 (except that the minimum voting power requirement necessary to meet the 3% threshold shall apply to the ownership of the group in the aggregate), including the minimum holding period, shall apply to each member of such group of stockholders and/or funds within the Qualifying Fund and a breach of any obligation, agreement or representation under this Section 2.8 by any member of such group shall be deemed a breach by the Eligible Stockholder. Should any stockholder withdraw from a group that is an Eligible Stockholder at any time prior to the annual meeting of stockholders, the Eligible Stockholder shall be deemed to own only those shares held by the remaining group.

(e) **Definition of Ownership.** For purposes of this Section 2.8, an Eligible Stockholder shall be deemed to "own" only those outstanding shares of the capital stock of the corporation as to which such stockholder possesses both (A) the full voting and investment rights pertaining to

the shares and (B) the full economic interest in (including the opportunity for profit and risk of loss on) such shares; provided that the number of shares calculated in accordance with clauses (A) and (B) shall not include any shares (1) sold by such stockholder or any of its affiliates in any transaction that has not been settled or closed, including any short sale, (2) borrowed by such stockholder or any of its affiliates for any purposes or purchased by such stockholder or any of its affiliates pursuant to an agreement to resell or (3) subject to any option, warrant, forward contract, swap, contract of sale, or other derivative or similar agreement entered into by such stockholder or any of its affiliates, whether any such instrument or agreement is to be settled with shares or with cash based on the notional amount or value of shares of outstanding capital stock of the corporation, in any such case which instrument or agreement has, or is intended to have, the purpose or effect of (x) reducing in any manner, to any extent or at any time in the future, such stockholder's or its affiliates' full right to vote or direct the voting of any such shares, and/or (y) hedging, offsetting or altering to any degree gain or loss arising from the full economic ownership of such shares by such stockholder or affiliate. An Eligible Stockholder shall "own" shares held in the name of a nominee or other intermediary so long as the stockholder retains the right to instruct how the shares are voted with respect to the election of directors and the right to direct the disposition of the shares and possesses the full economic interest in the shares. A person's ownership of shares shall be deemed to continue during any period in which (A) the person has loaned such shares, provided that the person has the power to recall such loaned shares at any time on no more than three (3) business days' notice and recalls such loaned shares within five (5) business days of being notified that its Proxy Access Nominee will be included in the corporation's proxy materials for the applicable annual meeting and holds such shares through such annual meeting; or (B) the person has delegated any voting power by means of a proxy, power of attorney or other instrument or arrangement that is revocable at any time by the person. Whether outstanding shares of the corporation's capital stock are "owned" for these purposes shall be determined by the board of directors, which determination shall be conclusive and binding on the corporation and its stockholders. The terms "owned," "owning" and other variations of the word "own" shall have correlative meanings.

(f) Proxy Access Notice. Within the time period specified in this Section 2.8 for providing the Proxy Access Notice, an Eligible Stockholder must deliver the following information in writing to the secretary of the corporation:

(i) the information, representations and agreements that would be required with respect to the nomination of directors pursuant to Section 2.5 as if the Proxy Access Nominee were being nominated in accordance with Section 2.5;

(ii) one or more written statements from the record holder of the shares (and from each intermediary through which the shares are or have been held during the requisite three (3) year holding period) verifying that, as of a date within seven days prior to the date of the Proxy Access Notice, the Eligible Stockholder owns, and has owned continuously for the preceding three (3) years, the Required Shares, and the Eligible Stockholder's agreement to provide, within five (5) business days after the record date for the annual meeting, written statements from the record

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holder and intermediaries verifying the Eligible Stockholder's continuous ownership of the Required Shares through the record date;

(iii) a copy of the Schedule 14N that has been filed with the Securities and Exchange Commission as required by Rule 14a-18 under the 1934 Act, as such rule may be amended;

(iv) a representation that the Eligible Stockholder:

(1) acquired all of the Required Shares in the ordinary course of business and not with the intent to change or influence control at the corporation and does not presently have such intent.

(2) intends to appear in person or through a qualified representative at the annual meeting to present the nomination,

(3) has not nominated and will not nominate for election to the board of directors at the annual meeting any person other than the Proxy Access Nominee(s) being nominated pursuant to this Section 2.8,

(4) has not engaged and will not engage in, and has not and will not be a participant in, another person's solicitation within the meaning of Rule 14a-1(l) under the 1934 Act in support of the election of any individual as a director at the annual meeting other than its Proxy Access Nominee or a nominee of the board of directors,

(5) will not distribute to any stockholder any form of proxy for the annual meeting other than the form distributed by the corporation,

(6) has provided and will provide facts, statements and other information in all communications with the corporation and its stockholders that are or will be true and correct in all material respects and do not and will not omit to state a material fact necessary in order to make the statements make, in light of the circumstances under which they were made, not misleading, and

(7) in the case of a nomination by an Eligible Stockholder that is composed of a group of stockholders, the designation by all group members of one group member that is authorized to act on behalf of all such members with respect to the nomination and matters related thereto, including any withdrawal of the nomination;

(v) in the case of any Eligible Stockholder that is a Qualifying Fund consisting of two or more funds, documentation reasonably satisfactory to the corporation demonstrating that the funds are eligible to be treated as a Qualifying Fund and that each fund constituting the Qualifying Fund otherwise meets the requirements set forth in this Section 2.8; and

(vi) an undertaking that the Eligible Stockholder agrees to:

(1) own the Required Shares through the date of the annual meeting,

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(2) assume all liability stemming from any legal or regulatory violation arising out of the Eligible Stockholder's communications with the stockholders of the corporation or out of the information that the Eligible Stockholder provided to the corporation,

(3) indemnify and hold harmless (jointly and severally with all other group members in the case of an Eligible Stockholder group) the corporation and each of its directors, officers and employees individually against any liability, loss or damages in connection with any threatened or pending action, suit or proceeding, whether legal, administrative or investigative, against the corporation or any of its directors, officers or employees arising out of any nomination, solicitation or other activity by the Eligible Stockholder in connection with its efforts to elect the Proxy Access Nominee pursuant to this Section 2.8,

(4) comply with all laws and regulations applicable to any solicitation in connection with the annual meeting or in connection with any other actions taken pursuant to this Section 2.8,

(5) file with the Securities and Exchange Commission any solicitation or other communication with the corporation's stockholders relating to the meeting at which the Proxy Access Nominee will be nominated, regardless of whether any such filing is required under Regulation 14A of the 1934 Act or whether any exemption from filing is available for such

solicitation or other communication,

(6) provide any additional information reasonably requested by the corporation to verify the Eligible Stockholder's ownership of the Required Shares, and

(7) in the event that any information included in the Proxy Access Notice or in any other communication by the Eligible Stockholder or the Proxy Access Nominee with the corporation, its stockholders or any other person in connection with the nomination or election ceases to be true and accurate in all material respects (or omits a material fact necessary to make the statements made not misleading), or that the Eligible Stockholder has failed to continue to satisfy the eligibility requirements described in Section 2.8(d), promptly (and in any event within two business days of discovering such defect) notify the secretary of the corporation of such defect and of the information that is required to correct any such defect; provided, however, that any such notice shall not be deemed to cure any such defect or to limit the remedies available to the corporation for such defect pursuant to this Section 2.8 (including any right to omit the Proxy Access Nominee from the proxy materials) or to permit any Eligible Stockholder or other person to change or add any proposed Proxy Access Nominee.

For purposes of this Section 2.8, a "Derivative Transaction" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Eligible Stockholder or any of its affiliates or associates, whether record or beneficial: (w) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation, (x) which otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation, (y) the effect or intent of which is to mitigate loss, manage risk or benefit of security value or price changes, or (z) which provides the right to vote or increase or decrease the voting power of, such Eligible Stockholder, or any of its affiliates or associates, with respect to any securities of the

corporation, which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Eligible Stockholder in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Eligible Stockholder is, directly or indirectly, a general partner or managing member.

(g) **Additional Information Regarding Proxy Access Nominee Eligibility.** Within the time period specified in this Section 2.8 for delivering the Proxy Access Notice, a Proxy Access Nominee must deliver to the secretary of the corporation a written representation and agreement (which shall be deemed to be a part of the Proxy Access Notice for purposes of this Section 2.8) that the Proxy Access Nominee:

(i) is not and has not been subject to any event specified in Rule 506(d) of Regulation D under the Securities Act of 1933, as amended (the “1933 Act”);

(ii) is not and has not been, within the past three years, an officer or director of a competitor of the corporation, as defined for purposes of Section 8 of the Clayton Antitrust Act of 1914;

(iii) will provide facts, statements and other information in all communications with the corporation and its stockholders that are or will be true and correct in all material respects (and shall not omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading); and

(iv) would qualify as independent under the listing standards of The Nasdaq Stock Market LLC (“Nasdaq”) or any stock exchange applicable to the corporation, any applicable rules of the Securities and Exchange Commission and any publicly disclosed standards used by the board of directors in determining and disclosing the independence of the corporation’s directors (the “Applicable Independence Standards”).

(h) Within the time period specified in this Section 2.8 for delivering the Proxy Access Notice, the Proxy Access Nominee shall provide all information necessary for the board of directors to verify whether such Proxy Access Nominee satisfies the Applicable Independence Standards. The corporation may request such additional information as necessary to permit the board of directors to verify whether each stockholder nominee is independent under the Applicable Independence Standards.

(i) **Restrictions on Re-Nomination.** Any Proxy Access Nominee who is included in the corporation’s proxy materials for a particular annual meeting of stockholders but either (A) withdraws from or becomes ineligible or unavailable for election at the annual meeting, or (B) does not receive votes cast in favor of the Proxy Access Nominee’s election of at least 25% of the shares represented in person or by proxy at the annual meeting, will be ineligible to be a Proxy Access Nominee pursuant to this Section 2.8 for the next two annual meetings following the meeting for which the Proxy Access Nominee has been nominated for election.

(j) **Omission and Removal of Proxy Access Nominees.** The corporation shall not be required to include, pursuant to this Section 2.8, any Proxy Access Nominee in its proxy materials for any meeting of stockholders and such nomination shall be disregarded and no vote on such

Proxy Access Nominee will occur, notwithstanding that proxies in respect of such vote may have been received by the corporation:

(i) in the event that the secretary of the corporation receives a notice that a stockholder has nominated a person for election to the board of directors pursuant to the advance notice requirements for stockholder nominees for director set forth in Section 2.5;

(ii) if the Eligible Stockholder who has nominated such Proxy Access Nominee has engaged in or is currently engaged in, or has been or is a “participant” in, its own or another person’s “solicitation” within the meaning of Rule 14a-1(l) under the 1934 Act in support of the election of any individual as a director at the meeting other than its Proxy Access Nominee(s) or a nominee of the board of directors;

(iii) who is not independent under the Applicable Independence Standards, as determined by the board of directors;

(iv) whose election or service as a member of the board of directors would cause the corporation to be in violation of these bylaws, the certificate of incorporation, the rules or regulations of the Nasdaq or any stock exchange applicable to the corporation, or any applicable law, rule or regulation or with any other publicly disclosed policies or guidelines of the corporation applicable to directors generally;

(v) who is or has been, within the past three years, an officer or director of a competitor of the corporation, as defined for purposes of Section 8 of the Clayton Antitrust Act of 1914;

(vi) who is a named subject of a pending criminal proceeding (excluding traffic violations and other minor offenses) or has been convicted in such a criminal proceeding within the past 10 years;

(vii) who is subject to any event specified in Rule 506(d) of Regulation D under the 1933 Act;

(viii) if such Proxy Access Nominee or the applicable Eligible Stockholder shall have provided information to the corporation with respect to such nomination that, as of the date provided, was untrue in any material respect or omitted to state a material fact necessary in order to make the statement made, in light of the circumstances under which it was made, not misleading, as determined by the board of directors; or

(ix) if the Eligible Stockholder or applicable Proxy Access Nominee breaches or otherwise contravenes any of the agreements or representations made by such Eligible Stockholder or Proxy Access Nominee or fails to comply with its obligations pursuant to this Section 2.8.

14.

(k) **Invalid Nomination.** Notwithstanding anything to the contrary set forth herein, the board of directors or the person presiding at the meeting shall declare a nomination by an Eligible Stockholder to be invalid, and such nomination shall be disregarded notwithstanding that proxies in respect of such vote may have been received by the corporation, if (A) the Proxy Access Nominee(s) and/or the applicable Eligible Stockholder has or have breached its or their obligations, agreements or representations under this Section 2.8, as determined by the board of directors or the person presiding at the annual meeting of stockholders, or (B) the Eligible Stockholder (or a qualified representative thereof) does not appear at the annual meeting of stockholders to present any nomination pursuant to this Section 2.8.

(l) **Exclusive Method; Interpretation.** Other than nominations made in accordance with Sections 2.5, 2.7 and Rule 14a-10 promulgated under the 1934 Act, this Section 2.8 shall be

with Sections 2.5, 2.7 and Rule 14a-19 promulgated under the 1934 Act, this Section 2.8 shall be the exclusive method for stockholders to include nominees for election to the board of directors in the corporation's proxy materials. For purposes of this Section 2.8, the board of directors, a committee of the board of directors, or any officer of the corporation designated by the board of directors or committee thereof, shall have the power and authority to interpret this Section 2.8 and to make any and all determinations necessary and advisable to apply the provisions of this Section 2.8. Any such determination shall be final and binding on the corporation, any Eligible Stockholder, any Proxy Access Nominee and any other person so long as made in good faith, without any further requirements.

(m) For purposes of Sections 2.7 and 2.8, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act; "affiliates" and "associates" shall have the meanings set forth in Rule 405 under the 1933 Act; "close of business" shall mean 5:00 p.m. local time at the principal executive offices of the corporation on any calendar day, whether or not the day is a business day; and a "qualified representative" of a stockholder means a duly authorized officer, manager or partner of such stockholder or a person authorized by a writing executed by such stockholder (or a reliable reproduction of the writing) delivered to the corporation prior to the making of such nomination or proposal at such meeting (and in any event not fewer than five (5) business days before the meeting) stating that such person is authorized to act for such stockholder as proxy at the meeting of stockholders.

2.9 QUORUM

The holders of a majority in voting power of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise required by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairman of the meeting or (ii) the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting in accordance with Section 2.10 of these bylaws.

15.

If a quorum be initially present, the stockholders may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum, if any action taken is approved by a majority of the stockholders initially constituting the quorum.

2.10 ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time and place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof are (i) announced at the meeting at which the adjournment is taken; (ii) displayed, during the time scheduled for the meeting, on the same electronic network used to enable stockholders and proxyholders to participate in the meeting by means of remote communication; or (iii) set forth in the notice of meeting given in accordance with Section 2.6 of these bylaws. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. The chairman of any meeting of stockholders shall have the power to adjourn the meeting to another time, date and place (if any), regardless of whether a quorum is present, at any time and for any reason.

2.11 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.13 of these bylaws, subject to the provisions of Sections 217 and 218 of the DGCL (relating to voting rights of fiduciaries, pledgors and joint owners, and to voting trusts and other voting agreements).

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder, and stockholders shall not be entitled to cumulate their votes in the election of directors or with respect to any matter submitted to a vote of the stockholders.

Notwithstanding the foregoing, if the stockholders of the corporation are entitled, pursuant to Sections 2115 and 301.5 of the California Corporations Code, to cumulate their votes in the election of directors, each such stockholder shall be entitled to cumulate votes (i.e., cast for any candidate a number of votes greater than the number of votes that such stockholder normally is entitled to cast) only if the candidates' names have been properly placed in nomination (in accordance with these bylaws) prior to commencement of the voting, and the stockholder requesting cumulative voting has given notice prior to commencement of the voting of the stockholder's intention to cumulate votes. If cumulative voting is properly requested, each holder of stock, or of any class or classes or of a series or series thereof, who elects to cumulate votes shall be entitled to as many votes as equals the number of votes that (absent this provision as to cumulative voting) he or she would be entitled to cast for the election of directors with respect to his or her shares of stock multiplied by the number of directors to be elected by him, and he or she may cast all of such votes for a single director or may distribute them among the number to be voted for, or for any two or more of them, as he or she may see fit.

2.12 STOCKHOLDER ACTION BY CONSENT WITHOUT A MEETING

Unless otherwise provided in the certificate of incorporation, any action required or permitted to be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the corporation in the manner required by Section 228 of the DGCL; provided that the corporation has not designated, and shall not designate, any information processing system for receiving such consents. In order that the corporation may determine the stockholders entitled to consent to such action without a meeting, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the board of directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by consent shall, by notice to the secretary of the corporation, request that the board of directors fix a record date. The board of directors shall promptly, but in all events within ten (10) days after the date on which such notice is received, adopt a resolution fixing the record date (unless a record date has previously been fixed by the board of directors pursuant to the second sentence of this Section 2.12). If no record date has been fixed by the board of directors pursuant to the second sentence of this Section 2.12 or otherwise within ten (10) days after the date on which such notice is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the board of directors is required by applicable law, shall be the first date on which a signed consent setting forth the action taken or proposed to be taken is delivered to the corporation in accordance with Section 228 of the DGCL. If no record date has been fixed by the board of directors pursuant to the second sentence of this Section 2.12, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting if prior action by the board of directors is required by applicable law shall be at the close of business on the date on which the board of directors adopts the resolution taking such prior action.

In the event of the delivery, in accordance with Section 228 of the DGCL, to the corporation of a consent or consents to take corporate action and/or any related revocation or revocations, the corporation shall engage independent inspectors of elections for the purpose of performing promptly a ministerial review of the validity of the consents and revocations. For the purpose of permitting the inspectors to perform such review, and to the fullest extent permitted by law, no action by consent and without a meeting shall be effective until such inspectors have completed their review, determined that the requisite number of valid and unrevoked consents delivered to the corporation in accordance with Section 228 of the DGCL have been obtained to authorize or take the action specified in the consents, and certified such determination for entry in the records of the corporation kept for the purpose of recording the proceedings of meetings of stockholders. Nothing contained in this Section 2.12 shall in any way be construed to suggest or imply that the board of directors or any stockholder shall not be entitled to contest the validity of any consent or revocation thereof, whether before or after such certification by the independent inspectors, or to take any other action (including, without limitation, the commencement, prosecution or defense of any litigation with respect thereto, and the seeking of injunctive relief in such litigation).

to the corporation in accordance with Section 228 of the DGCL, and not revoked.

2.13 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING

For purposes of determining the stockholders entitled to notice of any meeting or to vote thereat, the board of directors may, except as otherwise required by law, fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which shall not be more than sixty (60) days nor less than ten (10) days before the date of any such meeting. If the board of directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the board of directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination.

If the board of directors does not so fix a record date, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the business day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

2.14 PROXIES

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the DGCL.

2.15 ORGANIZATION

The president, or in the absence of the president, the chairman of the board, or, in the absence of the president and the chairman of the board, one of the corporation's vice presidents, shall call the meeting of the stockholders to order, and shall act as chairman of the meeting. In the absence of the president, the chairman of the board, and all of the vice presidents, the stockholders shall appoint a chairman for such meeting. The chairman of any meeting of stockholders shall determine the order of business and the procedures at the meeting, including such matters as the regulation of the manner of voting and the conduct of business. Such procedures prescribed by the chairman of such meeting, may include, without limitation, the following: (a) the establishment

of an agenda or order of business for the meeting; (b) rules and procedures for maintaining order at the meeting and the safety of those present; (c) limitations on attendance at or participation in the meeting to stockholders entitled to vote at the meeting, their duly authorized and constituted proxies or such other persons as the presiding person of the meeting or the board of directors shall determine; (d) restrictions on entry to the meeting after the time fixed for the commencement thereof; (e) limitations on the time, if any, allotted to questions or comments by participants, (f) restricting the use of audio/video recording devices and cell phones; (g) complying with any state and local laws and regulations concerning safety and security; (h) procedures (if any) requiring attendees to provide the corporation advance notice of their intent to attend the meeting; and (i) any additional attendance or other procedures or requirements for proponents submitting a proposal pursuant to Rule 14a-8 promulgated under the 1934 Act. The secretary of the corporation shall not consent to all meetings of the stockholders, but in the absence of the president or

shall act as secretary at all meetings of the stockholders, but in the absence of the secretary at any meeting of the stockholders, the chairman of the meeting may appoint any person to act as secretary of the meeting.

2.16 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The corporation shall prepare, no later than the tenth (10th) day before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting; provided, however, that if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth (10th) day before the meeting date. Such list shall be arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Nothing in this Section 2.16 shall require the corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of ten (10) days ending on the day before the meeting date: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation.

2.17 WAIVER OF NOTICE

Whenever notice is required to be given under any provision of the DGCL or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, or by electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice or waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

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2.18 DELIVERY TO THE CORPORATION

Whenever Article II of these bylaws requires one or more persons (including a record or beneficial owner of stock) to deliver a document or information to the corporation or any officer, employee or agent thereof (including any notice, request, questionnaire, revocation, representation or other document or agreement), the corporation shall not be required to accept delivery of such document or information unless the document or information is in writing exclusively (and not in an electronic transmission) and delivered exclusively by hand (including, without limitation, overnight courier service) or by certified or registered mail, return receipt requested.

ARTICLE III

DIRECTORS

3.1 POWERS

Subject to the provisions of the DGCL and to any limitations in the certificate of incorporation or these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the board of directors.

3.2 NUMBER OF DIRECTORS

The board of directors shall consist of ten (10) members. The number of directors may be changed by an amendment to this bylaw, duly adopted by the board of directors or by the stockholders, or by a duly adopted amendment to the certificate of incorporation. The directors shall be divided into three classes, with the term of office of the first class (Class I Directors), which class shall initially consist of four (4) directors, to expire at the 2024 annual meeting of stockholders; the term of office of the second class (Class II Directors), which class shall initially consist of three (3) directors, to expire at the 2025 annual meeting of stockholders; the term of office of the third class (Class III Directors), which class shall initially consist of three (3) directors, to expire at the 2026 annual meeting of stockholders; and thereafter for each such term to expire at each third succeeding annual meeting of stockholders held after such election.

3.3 ELECTION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, directors shall be elected at each annual meeting of stockholders to hold office as provided in Section 3.2 of these bylaws. Each director, including a director elected or appointed to fill a vacancy, shall hold office until the expiration of the term for which elected and until a successor has been elected and qualified.

3.4 RESIGNATION AND VACANCIES

Any director may resign effective on giving written notice to the chairman of the board, the president, the secretary or the board of directors, unless the notice specifies a later time for that resignation to become effective. If the resignation of a director is effective at a future time, the board of directors may, in accordance with Section 223(d) of the DGCL, elect a successor to take office when the resignation becomes effective.

Vacancies in the board of directors may be filled by a majority of the remaining directors, even if less than a quorum, or by a sole remaining director; however, a vacancy created by the removal of a director by the vote of the stockholders or by court order may be filled only by the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present (which shares voting affirmatively also constitute a majority of the required quorum). Each director so elected shall hold office for a term expiring at the next annual meeting of the stockholders at which the term of office of the class to which such director has been elected expires.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(i) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(ii) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the DGCL.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten (10) percent of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

3.5 REMOVAL OF DIRECTORS

Unless otherwise restricted by statute, by the certificate of incorporation or by these bylaws, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors.

3.6 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

Regular meetings of the board of directors may be held at any place (if any) within or outside the State of Delaware that has been designated from time to time by resolution of the board.

in the notice or if there is no notice, at the principal executive office of the corporation.

Any meeting of the board, regular or special, may be held by conference telephone or other communication equipment, so long as all directors participating in the meeting can hear one another; and all such participating directors shall be deemed to be present in person at the meeting.

3.7 REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice at such time as shall from time to time be determined by the board of directors. If any regular meeting day shall fall on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day.

3.8 SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairman of the board, the president, any vice president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered orally, personally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, or by electronic mail or other electronic transmission. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered by any other permitted means, it shall be delivered at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

3.9 QUORUM

A majority of the authorized number of directors shall constitute a quorum for the transaction of business, except to adjourn as provided in Section 3.10 of these bylaws. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the board of directors, subject to the provisions of the certificate of incorporation and applicable law.

To the fullest extent permitted by law, a meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the quorum for that meeting.

3.10 ADJOURNMENT

A majority of the directors present, whether or not constituting a quorum, may adjourn any meeting of the board to another time and place.

3.11 NOTICE OF ADJOURNMENT

Notice of the time and place of holding an adjourned meeting of the board need not be given unless the meeting is adjourned for more than twenty-four (24) hours. If the meeting is adjourned for more than twenty-four (24) hours, then notice of the time and place of the adjourned meeting shall be given before the adjourned meeting takes place, in the manner specified in Section 3.8 of these bvlaws. to the directors who were not present at the time of the adiournment.

3.12 BOARD ACTION BY CONSENT WITHOUT A MEETING

Any action required or permitted to be taken by the board of directors may be taken without a meeting, provided that all members of the board individually or collectively consent in writing or by electronic transmission to that action. After an action is taken, the consent or consents relating thereto shall be filed with the minutes of the proceedings of the board of directors in the same paper or electronic form as the minutes are maintained.

3.13 FEES AND COMPENSATION OF DIRECTORS

Directors and members of committees may receive such compensation, if any, for their services and such reimbursement of expenses as may be fixed or determined by resolution of the board of directors. This Section 3.13 shall not be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee or otherwise and receiving compensation for those services.

3.14 APPROVAL OF LOANS TO OFFICERS

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or any of its subsidiaries, including any officer or employee who is a director of the corporation or any of its subsidiaries, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the board of directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing contained in this section shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

3.15 SOLE DIRECTOR PROVIDED BY CERTIFICATE OF INCORPORATION

In the event only one director is required by these bylaws or the certificate of incorporation, then any reference herein to notices, waivers, consents, meetings or other actions by a majority or quorum of the directors shall be deemed to refer to such notice, waiver, etc., by such sole director, who shall have all the rights and duties and shall be entitled to exercise all of the powers and shall assume all the responsibilities otherwise herein described as given to the board of directors.

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ARTICLE IV

COMMITTEES

4.1 COMMITTEES OF DIRECTORS

The board of directors may, by resolution adopted by a majority of the authorized number of directors, designate one (1) or more committees, each consisting of two or more directors, to serve at the pleasure of the board. The board may designate one (1) or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. The appointment of members or alternate members of a committee requires the vote of a majority of the authorized number of directors. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any committee, to the extent provided in the resolution of the board, shall have and may exercise all the powers and authority of the board, but no such committee shall have the power or authority to (i) amend the certificate of incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted by the board of directors as provided in Section 151(a) of the DGCL, fix the designations and any of

the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the corporation or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the corporation or fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series), (ii) adopt an agreement of merger or consolidation under Sections 251, 252, 254, 255, 256, 257, 258, 263 or 264 of the DGCL, (iii) recommend to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, (iv) recommend to the stockholders a dissolution of the corporation or a revocation of a dissolution or (v) amend the bylaws of the corporation; and, unless the board resolution establishing the committee, the bylaws or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the DGCL.

4.2 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the following provisions of Article III of these bylaws: Section 2.17 (waiver of notice); Section 3.6 (place of meetings; meetings by telephone), Section 3.7 (regular meetings), Section 3.8 (special meetings; notice), Section 3.9 (quorum), Section 3.10 (adjournment), Section 3.11 (notice of adjournment) and Section 3.12 (board action by consent without meeting), with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the board of directors, and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors

may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

4.3 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

ARTICLE V

OFFICERS

5.1 OFFICERS

The Corporate Officers of the corporation shall be a president, a secretary and a chief financial officer. The corporation may also have, at the discretion of the board of directors, a chairman of the board, one or more vice presidents (however denominated), one or more assistant secretaries, a treasurer and one or more assistant treasurers, and such other officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws. Any number of offices may be held by the same person.

In addition to the Corporate Officers of the corporation described above, there may also be such Administrative Officers of the corporation as may be designated and appointed from time to time by the president of the corporation in accordance with the provisions of Section 5.12 of these bylaws.

5.2 ELECTION OF OFFICERS

The Corporate Officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or Section 5.5 of these bylaws, shall be chosen by the board of directors, subject to the rights, if any, of an officer under any contract of employment, and shall hold their respective offices for such terms as the board of directors may from time to time determine.

5.3 SUBORDINATE OFFICERS

The board of directors may appoint, or may empower the president to appoint, such other Corporate Officers as the business of the corporation may require, each of whom shall hold office for such period, have such power and authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

The president may from time to time designate and appoint Administrative Officers of the corporation in accordance with the provisions of Section 5.12 of these bylaws.

5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of a Corporate Officer under any contract of employment, any Corporate Officer may be removed, either with or without cause, by the board of directors at any

regular or special meeting of the board or, except in case of a Corporate Officer chosen by the board of directors, by any Corporate Officer upon whom such power of removal may be conferred by the board of directors.

Any Corporate Officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the Corporate Officer is a party.

Any Administrative Officer designated and appointed by the president may be removed, either with or without cause, at any time by the president. Any Administrative Officer may resign at any time by giving written notice to the president or to the secretary of the corporation.

5.5 VACANCIES IN OFFICES

A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these bylaws for regular appointments to that office.

5.6 CHAIRMAN OF THE BOARD

The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise such other powers and perform such other duties as may from time to time be assigned to him by the board of directors or as may be prescribed by these bylaws. If there is no president, then the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these bylaws.

5.7 PRESIDENT

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, if there be such an officer, the president shall be the chief executive officer of the corporation and shall, subject to the control of the board of directors, have general supervision, direction and control of the business and the officers of the corporation. He or she shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the board of directors. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

5.8 VICE PRESIDENTS

In the absence or disability of the president, and if there is no chairman of the board, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to

time may be prescribed for them respectively by the board of directors, these bylaws, the president or the chairman of the board.

5.9 SECRETARY

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the board of directors may direct, a book of minutes of all meetings and actions of the board of directors, committees of directors and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings and the proceedings thereof

the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates (if any) evidencing such shares and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors required to be given by law or by these bylaws. He or she shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these bylaws.

5.10 CHIEF FINANCIAL OFFICER

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings and shares. The books of account shall at all reasonable times be open to inspection by any director for a purpose reasonably related to his position as a director.

The chief financial officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositaries as may be designated by the board of directors. He or she shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his or her transactions as chief financial officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

5.11 ASSISTANT SECRETARY

The assistant secretary, if any, or, if there is more than one, the assistant secretaries in the order determined by the board of directors (or if there be no such determination, then in the order of their election) shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

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5.12 ADMINISTRATIVE OFFICERS

In addition to the Corporate Officers of the corporation as provided in Section 5.1 of these bylaws and such subordinate Corporate Officers as may be appointed in accordance with Section 5.3 of these bylaws, there may also be such Administrative Officers of the corporation as may be designated and appointed from time to time by the president of the corporation. Administrative Officers shall perform such duties and have such powers as from time to time may be determined by the president or the board of directors in order to assist the Corporate Officers in the furtherance of their duties. In the performance of such duties and the exercise of such powers, however, such Administrative Officers shall have limited authority to act on behalf of the corporation as the board of directors shall establish, including but not limited to, limitations on the dollar amount and on the scope of agreements or commitments that may be made by such Administrative Officers on behalf of the corporation, which limitations may not be exceeded by such individuals or altered by the president without further approval by the board of directors.

5.13 AUTHORITY AND DUTIES OF OFFICERS

In addition to the foregoing powers, authority and duties, all officers of the corporation shall respectively have such authority and powers and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors.

ARTICLE VI

INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES
AND OTHER AGENTS

6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS

The corporation shall, to the maximum extent and in the manner permitted by the DGCL as the same now exists or may hereafter be amended, indemnify any person against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding, whether civil, criminal, administrative or investigative (a "proceeding") in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was a director or officer of the corporation, whether the basis of such proceeding is alleged action in an official capacity as a director or officer or trustee or in any other capacity while serving as a director or officer. For purposes of this Section 6.1, a "director" or "officer" of the corporation shall mean any person (i) who is or was a director or officer of the corporation, (ii) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

Except with respect to a proceeding to enforce a right to indemnification or advancement of expenses, the corporation shall be required to indemnify a director or officer in connection with a proceeding (or part thereof) initiated by such director or officer only if the initiation of such

proceeding (or part thereof) by the director or officer was authorized by the board of directors of the corporation.

The corporation shall pay the expenses (including attorney's fees) incurred by a director or officer of the corporation in defending any proceeding referred to in this Section 6.1 in advance of its final disposition; provided, however, that payment of expenses incurred by a director or officer of the corporation in advance of the final disposition of such proceeding shall be made only upon receipt of an undertaking by or on behalf of the director or officer to repay all amounts advanced if it should ultimately be determined that the director or officer is not entitled to be indemnified under this Section 6.1.

Notwithstanding the other provisions of this Article, to the extent that a director or officer has been successful on the merits or otherwise in defense of any proceeding referred to in the first paragraph of this Section 6.1, or in defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorney's fees) actually and reasonably incurred thereby in connection therewith; provided, however, that, notwithstanding the final sentence of the first paragraph of this Section 6.1, any director or officer who is not a current or former director or officer of this corporation (as such term is defined in the final sentence of Section 145(c)(1) of the DGCL) shall be entitled to indemnification under this paragraph only if such person has satisfied the standard of conduct required for indemnification under Section 145(a) or Section 145(b) of the DGCL, as applicable.

The rights conferred on any person by this Article shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the corporation's certificate of incorporation, these bylaws, agreement, vote of the stockholders or disinterested directors or otherwise.

Any repeal or modification of the foregoing provisions of this Article shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

6.2 RIGHT TO BRING SUIT

If a claim for indemnification or advancement under Section 6.1 is not paid in full by the corporation within sixty (60) days after a written claim has been received by the corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the director or officer seeking such indemnification or advancement may at any time thereafter bring suit against the corporation to recover the unpaid amount of the claim. To the fullest extent permitted by law, if successful in whole or in part in any such suit, or in a suit brought by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking, such director or officer shall be entitled to be paid also the expense of prosecuting or defending such suit. In (i) any suit brought by a director or officer to enforce a right to indemnification hereunder (but not in a suit brought by a director or officer to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) in any suit brought by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the corporation shall be entitled to recover such expenses upon a final adjudication that, the director or officer has not met any applicable standard for indemnification set forth in the DGCL. Neither the failure of

the corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the director or officer is proper in the

circumstances because such director or officer has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) that the director or officer has not met such applicable standard of conduct, shall create a presumption that the director or officer has not met the applicable standard of conduct or, in the case of such a suit brought by the director or officer, be a defense to such suit. In any suit brought by the director or officer to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the director or officer is not entitled to be indemnified, or to such advancement of expenses, under this Article or otherwise shall be on the corporation.

6.3 INDEMNIFICATION OF OTHERS

The corporation shall have the power, to the maximum extent and in the manner permitted by the DGCL as the same now exists or may hereafter be amended, to indemnify any person (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any threatened, pending or completed action, suit, or proceeding, in which such person was or is a party or is threatened to be made a party by reason of the fact that such person is or was an employee or agent of the corporation. For purposes of this Section 6.3, an "employee" or "agent" of the corporation (other than a director or officer) shall mean any person (i) who is or was an employee or agent of the corporation, (ii) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.4 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the DGCL.

ARTICLE VII

RECORDS AND REPORTS

7.1 MAINTENANCE AND INSPECTION OF RECORDS

The corporation shall, either at its principal executive office or at such place or places as designated by the board of directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books and other records of its business and properties.

Any stockholder of record, in person or by attorney or other agent, shall, upon written

any stockholder or record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

7.2 INSPECTION BY DIRECTORS

Any director shall have the right to examine (and to make copies of) the corporation's stock ledger, a list of its stockholders and its other books and records for a purpose reasonably related to his or her position as a director.

7.3 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairman of the board, if any, the president, any vice president, the chief financial officer, the secretary or any assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, consent with respect to, represent and exercise on behalf of this corporation all rights incident to any and all shares of the stock or voting securities of any other corporation or corporations or entity or entities standing in the name of this corporation. The authority herein granted may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

7.4 CERTIFICATION AND INSPECTION OF BYLAWS

The original or a copy of these bylaws, as amended or otherwise altered to date, certified by the secretary, shall be kept at the corporation's principal executive office and shall be open to inspection by the stockholders of the corporation, at all reasonable times during office hours.

ARTICLE VIII

GENERAL MATTERS

8.1 RECORD DATE FOR PURPOSES OTHER THAN NOTICE AND VOTING

For purposes of determining the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted and which shall not be more than sixty (60) days before any such action. In that case, only stockholders of record at the close of business on the date so fixed are entitled to receive the dividend, distribution or allotment of rights, or to exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date so fixed, except as otherwise provided by law.

If the board of directors does not so fix a record date, then the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the applicable resolution.

8.2 CHECKS; DRAFTS; EVIDENCES OF INDEBTEDNESS

From time to time, the board of directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.3 CORPORATE CONTRACTS AND INSTRUMENTS HOW EXECUTED

The board of directors, except as otherwise provided in these bylaws, may authorize and empower any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such power and authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

8.4 STOCK CERTIFICATES; TRANSFER; PARTLY PAID SHARES

The shares of the corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the corporation by, any two authorized officers of the corporation, including, without limitation, the chairman of the board of directors, vice-chairman of the board of directors, the president, vice-president, treasurer, an assistant treasurer, the secretary or an assistant secretary representing the number of shares registered in certificate form. Any or all of the signatures on

the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

Certificates for shares shall be of such form and device as the board of directors may designate.

Upon surrender to the secretary or transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, or upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.5 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.6 LOST CERTIFICATES

Except as provided in this Section 8.6, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new share certificate or uncertificated shares in place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require indemnification of the corporation secured by a bond or other adequate security sufficient to protect the corporation against any claim that may be made against it, including any expense or liability, on account of the alleged loss, theft or destruction of the certificate or the issuance of new certificate or uncertificated shares.

8.7 TRANSFER AGENTS AND REGISTRARS

The board of directors may appoint one or more transfer agents or transfer clerks, and one

or more registrars, each of which shall be an incorporated bank or trust company -- either domestic or foreign, who shall be appointed at such times and places as the requirements of the corporation may necessitate and the board of directors may designate.

8.8 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, as used in these bylaws, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both an entity and a natural person.

ARTICLE IX

AMENDMENTS

The original or other bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote or by the board of directors of the corporation. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

ARTICLE X

FORUM FOR ADJUDICATION OF DISPUTES

10.1 Unless the corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have subject matter jurisdiction, another state court located within the State of Delaware or, if no state court located within the State of Delaware has subject matter jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom shall be the sole and exclusive forum for the following claims or causes of action under Delaware statutory or common law: (a) any derivative claim or cause of action brought on behalf of the corporation; (b) any claim or cause of action for breach of a fiduciary duty owed by any current or former director, officer or other employee of the corporation, to the corporation or the corporation's stockholders; (c) any claim or cause of action against the corporation or any current or former director, officer or other employee of the corporation, arising out of or pursuant to any provision of the DGCL, the certificate of incorporation or the bylaws of the corporation; (d) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of the certificate of incorporation or the bylaws of the corporation (including any right, obligation, or remedy thereunder); (e) any claim or cause of action as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware; and (f) any claim or cause of action against the corporation or any current or former director, officer or other employee of the corporation, governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants. This Section 10.1 shall not apply

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to claims or causes of action brought to enforce a duty or liability created by the 1933 Act, or the 1934 Act, or any other claim for which the federal courts have exclusive jurisdiction.

10.2 Unless the corporation consents in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the 1933 Act.

10.3 Any person or entity holding, owning or otherwise acquiring any interest in any security of the corporation shall be deemed to have notice of and consented to the provisions of this Article.

NEUROCRINE BIOSCIENCES, INC.
2020 EQUITY INCENTIVE PLAN

ADOPTED BY THE COMPENSATION COMMITTEE: MARCH 16, 2020
APPROVED BY THE STOCKHOLDERS: MAY 19, 2020
AMENDED AND RESTATED BY THE COMPENSATION COMMITTEE: MARCH 14, 2022
APPROVED BY THE STOCKHOLDERS: MAY 18, 2022
AMENDED BY THE COMPENSATION COMMITTEE: MARCH 24, 2023
APPROVED BY THE STOCKHOLDERS: May 17, 2023
TERMINATION DATE: MARCH 15, 2030

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1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the day immediately following the Effective Date: (i) no additional awards may be granted under the Prior Plan; (ii) the Prior Plan's Available Reserve, plus any Prior Plan's Returning Shares (as such shares become available from time to time), will become available for issuance pursuant to Awards granted under this Plan; and (iii) all Prior Plan Awards will remain subject to the terms of the Prior Plan (except that any Prior Plan's Returning Shares will become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.

(b) Plan Purpose. The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate, and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) Adoption Date. The Plan will come into existence on the Adoption Date. No Award may be granted under the Plan prior to the Adoption Date. Any Award granted prior to the Effective Date is contingent upon timely receipt of stockholder approval to the extent required under applicable tax, securities and regulatory rules, and satisfaction of any other compliance requirements.

2. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve.

(i) Subject to Section 2(a)(iii), any adjustment in accordance with Section 2(b), and any adjustment as necessary to implement any Capitalization Adjustment, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed the sum of: (i) the Prior Plan's Available Reserve; (ii) an additional 3,300,000 shares that were approved at the Annual Meeting in 2020; (iii) an additional 5,900,000 shares that were approved at the Annual Meeting in 2022; (iv) an additional 6,600,000 shares that were approved at the Annual Meeting in 2023; and (v) the number of Prior Plan's Returning Shares, if any, as such shares become available from time to time.

(ii) Subject to Section 2(b), the number of shares of Common Stock available for issuance under the Plan will be reduced by: (A) one share for each share of Common Stock issued pursuant to an Appreciation Award granted under the Plan; (B) one share for each share of Common Stock issued pursuant to a Full Value Award granted under the Plan prior to May 18, 2022; and (C) 2.13 shares for each share of Common Stock issued pursuant to a Full Value Award granted under the Plan on or after May 18, 2022.

(iii) Subject to Section 2(b), the number of shares of Common Stock available for issuance under the Plan will be increased by: (A) one share for each Prior Plan's Returning Share or 2020 Plan Returning Share (as defined in Section 2(b)(iii)(1)) subject to an Appreciation Award; (B) one share for each Prior Plan's Returning Share or 2020 Plan Returning Share subject to a Full Value Award that returns to the Plan prior to May 18, 2022; and (C) 2.13 shares for each Prior Plan's Returning Share or 2020 Plan Returning Share subject to a Full Value Award that returns to the Plan on or after May 18, 2022.

(b) Share Reserve Operation.

(i) Limit Applies to Shares Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(ii) Actions that Will Not Constitute Issuance of Shares and Will Not Reduce Share Reserve. The following actions will not result in an issuance of shares of Common Stock under the Plan and accordingly will not reduce the number of shares of Common Stock subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued; and (2) the settlement of any portion of an Award in cash (*i.e.*, the Participant receives cash rather than shares of Common Stock).

(iii) Reversion of Shares to the Share Reserve.

(1) Shares Available for Subsequent Issuance. If any shares of Common Stock issued pursuant to an Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares, then such shares will revert to the Share Reserve and become available again for issuance under the Plan (such shares, the “*2020 Plan Returning Shares*”).

(2) Shares Not Available for Subsequent Issuance. The following shares of Common Stock will not become available again for issuance under the Plan: (i) any shares that are reacquired or withheld (or not issued) by the Company to satisfy the exercise, strike or purchase price of an Award or a Prior Plan Award (including any shares subject to such award that are not delivered because such award is exercised through a reduction of shares subject to such award (*i.e.*, “net exercised”)); (ii) any shares that are reacquired or withheld (or not issued) by the Company to satisfy a tax withholding obligation in connection with an Award or a Prior Plan Award; (iii) any shares repurchased by the Company on the open market with the proceeds of the exercise, strike or purchase price of an Award or a Prior Plan Award; and (iv) in the event that a Stock Appreciation Right granted under the Plan or a stock appreciation right granted under the Prior Plan is settled in shares of Common Stock, the gross number of shares of Common Stock subject to such award.

3. ELIGIBILITY AND LIMITATIONS.

(a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.

(b) Specific Award Limitations.

(i) Limitations on Incentive Stock Option Recipients. Incentive Stock Options may be granted only to Employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and (f) of the Code).

(ii) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) with respect to which Incentive Stock Options are exercisable for the first time by any Participant during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (1) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (2) such Option is not exercisable after the expiration of five years from the date of grant of such Option.

(iv) Limitations on Nonstatutory Stock Options and SARs. Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any “parent” of the Company (as such term is defined in Rule 405) unless the stock underlying such Awards is treated as “service recipient stock” under Section 409A because such Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Awards otherwise comply with the distribution requirements of Section 409A.

(c) Aggregate Incentive Stock Option Limit. Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustment as necessary to implement any Capitalization Adjustment, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 30,500,000 shares.

(d) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, by the Company to any individual for service as a Non-Employee Director with respect to any period commencing on the date of the Annual Meeting for a particular year and ending on the date of the Annual Meeting for the next subsequent year (the “*Annual Period*”), including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed \$1,250,000 in total value. In addition, the aggregate value of any equity award(s) granted under the Plan or otherwise by the Company to any individual for service as a Non-Employee Director upon or in connection with his or her initial election or appointment to the Board will not exceed \$2,000,000 in total value; for the avoidance of doubt, the aggregate compensation granted or paid, as applicable, by the Company to any individual for service as a Non-Employee Director with respect to an Annual Period in which such individual is first appointed or elected to the Board will not exceed the sum of the two preceding limitations in this Section 3(d). The value of any equity awards, for purposes of the limitations described in this Section 3(d), will be calculated based on the grant date fair value of such equity awards for financial reporting

purposes. The limitations in this Section 3(d) will apply beginning with the Annual Period in which the Annual Meeting in 2020 occurs.

4. OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; *provided, however*, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; *provided, however*, that each Option Agreement and SAR Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) **Term.** Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) **Exercise or Strike Price.** Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.

(c) **Exercise Procedure and Payment of Exercise Price for Options.** In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a "cashless exercise" program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) the Common Stock is publicly traded at the time of exercise, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) **Exercise Procedure and Payment of Appreciation Distribution for SARs.** In order to exercise a SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the SAR Agreement or otherwise provided by the Company. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such

appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) Transferability. Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided, further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; *provided, however*, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant's request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) Vesting. The Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

(g) Termination of Continuous Service for Cause. Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service, and the Participant will have no further right, title or interest in the forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than for Cause. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; *provided, however*, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination or death, as applicable, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at

any time during the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law; or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions; *provided, however*, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(j) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Transaction in which such Award is not assumed, continued or substituted, (iii) a Change in Control, or (iv) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares. Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. AWARDS OTHER THAN OPTIONS AND STOCK APPRECIATION RIGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board. The terms and conditions of separate Restricted Stock Awards and RSU Awards need not be identical; *provided, however*, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

(1) Restricted Stock Awards. To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) RSU Awards. A RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of a RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Award Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to a RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) Consideration.

(1) Restricted Stock Awards. A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of consideration (including future services) as the Board may determine and permissible under Applicable Law.

(2) RSU Awards. Unless otherwise determined by the Board at the time of grant, a RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.

(iii) Vesting. The Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iv) Termination of Continuous Service. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (1) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement, and (2) any portion of the Participant's RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(v) Settlement of RSU Awards. A RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) Performance Awards. With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. Performance Awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the Common Stock.

(c) Other Awards. Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards, and all other terms and conditions of such Other Awards.

6. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan pursuant to Section 2(a); (ii) the class(es) and maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c); and (iii) the class(es) and number of shares of Common Stock and the exercise, strike or purchase price of Common Stock subject to outstanding Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock will be created in order to implement any Capitalization Adjustment. The Board will determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that may be created by the adjustments referred to in the preceding provisions of this Section 6(a).

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to a forfeiture condition or the Company's right of repurchase may be reacquired or repurchased by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service.

(c) Transaction. In the event of a Transaction, the provisions of this Section 6(c) will apply to each outstanding Award unless otherwise provided in the instrument evidencing the Award, in any other written agreement between a Participant and the Company or an Affiliate, or in any director compensation policy of the Company.

(i) Awards May Be Assumed. In the event of a Transaction, the Acquiring Entity may assume or continue any or all outstanding Awards or may substitute similar awards for any or all outstanding Awards (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to outstanding Awards may be assigned by the Company to the Acquiring Entity. For clarity, in the event of a Transaction, the Acquiring Entity may choose to assume or continue only a portion of an outstanding Award, to substitute a similar award for only a portion of an outstanding Award, or to assume or

continue, or substitute similar awards for, the outstanding Awards held by some, but not all, Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) Awards Held by Current Employee and Director Participants. In the event of a Transaction in which the Acquiring Entity does not assume or continue outstanding Awards or substitute similar awards for outstanding Awards, then with respect to any such Awards that have not been assumed, continued or substituted and that are held by Participants who are Employees or Directors and, in each case, whose Continuous Service has not terminated prior to the effective time of the Transaction (referred to as the “**Current Employee and Director Participants**”), the vesting (and exercisability, if applicable) of such Awards will be accelerated in full (and with respect to any such Awards that are subject to performance-based vesting conditions or requirements, vesting will be deemed to be satisfied at the greater of (x) the target level of performance or (y) the actual level of performance measured in accordance with the applicable performance goals as of the date of the Transaction) to a date prior to the effective time of such Transaction (contingent upon the effectiveness of the Transaction) as the Board determines (or, if the Board does not determine such a date, to the date that is 15 days prior to the effective time of the Transaction), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Transaction). With respect to the vesting of Awards that will accelerate upon the occurrence of a Transaction pursuant to this Section 6(c)(ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Transaction.

(iii) Awards Held by Persons other than Current Participants. In the event of a Transaction in which the Acquiring Entity does not assume or continue outstanding Awards or substitute similar awards for outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Employee and Director Participants, such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Transaction; *provided, however*, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Transaction.

(iv) Payment for Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event an Award will terminate if not exercised at or prior to the effective time of a Transaction, the Board may provide that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award, over (2) any exercise price payable by such holder in connection with such exercise.

(d) Involuntary Termination Upon or Following a Transaction. Except as otherwise provided in the Award Agreement, in any other written agreement between a Participant and the Company or an Affiliate, or in any director compensation policy of the Company, in the event that an Employee or Director’s Continuous Service is involuntarily terminated without Cause (including any such termination due to such Employee or Director’s death or Disability) upon or within 12 months following the effective time of a Transaction, the vesting (and exercisability, if applicable) of any Assumed Awards (as defined in this Section 6(d)) held by such Employee or Director as of the date of such termination will be accelerated in full (and with respect to any such Awards that are subject to performance-based vesting conditions or requirements, vesting will be deemed to be satisfied at the greater of (x) the target level of performance or (y) the actual level of performance measured in accordance with the applicable performance goals as of the date of such termination), effective as of the date of such termination. For purposes of this Section 6(d), an “**Assumed Award**” means any outstanding Award that was assumed or continued, or any outstanding similar award that was granted in substitution for an Award, in each case by the Acquiring Entity in connection with the applicable Transaction.

(e) Appointment of Stockholder Representative. As a condition to the receipt of an Award, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant’s behalf with respect to any escrow, indemnities and any contingent consideration.

(f) No Restriction on Right to Undertake Transactions. The grant of any Award and the issuance of shares of Common Stock pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company’s capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 7(c).

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time: (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; and (6) the Fair Market Value applicable to an Award.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Awards fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock, including any Transaction, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair a Participant's rights under any Award granted while the Plan is in effect unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(vii) To amend the Plan in any respect the Board deems necessary or advisable; *provided, however*, that stockholder approval will be required for any such amendment to the extent required by Applicable Law. Except as provided above, a Participant's rights under any Award granted before any amendment of the Plan will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided, however*, that a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant foreign jurisdiction).

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the

Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee, as applicable), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with any Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revert in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act, and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Cancellation and Re-Grant of Awards. Except in connection with a Transaction, as provided in Section 6(a) relating to Capitalization Adjustments, or unless the stockholders of the Company have approved such an action within 12 months prior to such an event, neither the Board nor any Committee will have the authority to: (i) reduce the exercise or strike price of any outstanding Option or SAR; or (ii) cancel any outstanding Option or SAR that has an exercise or strike price greater than the then-current Fair Market Value in exchange for cash or other Awards under the Plan.

(f) Delegation to an Officer. The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following: (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law, other types of Awards) and, to the extent permitted by Applicable Law, the terms thereof; and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; *provided, however*, that the resolutions or charter adopted by the Board or any Committee evidencing such delegation will specify the total number of shares of Common Stock that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the applicable form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

8. TAX WITHHOLDING.

(a) Withholding Authorization. As a condition to acceptance of any Award, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate provision for, any sums required to satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company will have no obligation to issue shares of Common Stock subject to an Award, unless and until such withholding obligations are satisfied.

(b) Satisfaction of Withholding Obligations. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any U.S. federal, state, local and/or foreign tax or social insurance contribution withholding obligations relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board; or (vi) by such other method as may be set forth in the Award Agreement.

(c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law, the Company has no duty or obligation to any Participant to advise such Participant as to the time or manner of exercising an Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such Participant of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to any Participant and will not be liable to any Participant for any adverse tax consequences to such Participant in connection with an Award. As a condition to accepting an Award, each Participant (i) agrees to not make any claim against the

Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges that any Option or SAR is exempt from Section 409A only if the exercise or strike price of such Option or SAR is at least equal to the "fair market value" of the Common Stock on the date of grant of such Option or SAR as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR, each Participant agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the exercise or strike price of such Option or SAR is less than the "fair market value" of the Common Stock on the date of grant of such Option or SAR as subsequently determined by the Internal Revenue Service.

(d) Withholding Indemnification. As a condition to accepting an Award, in the event that the amount of the Company's and/or its Affiliate's withholding obligations in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount.

9. MISCELLANEOUS.

(a) Dividends and Dividend Equivalents. Dividends or dividend equivalents may not be paid or credited to any Awards.

(b) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(c) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(d) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (*e.g.*, Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (*e.g.*, exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(e) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(f) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(g) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company or any Affiliate is reduced (for example, and without limitation, if the Participant is an Employee and has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or

payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(h) Execution of Additional Documents. As a condition to accepting an Award, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(i) Electronic Delivery and Participation. Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award, the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (*e.g.*, a stock certificate or electronic entry evidencing such shares) will be determined by the Company.

(j) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law, and any other clawback policy that the Company adopts. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntarily terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(k) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(l) Transfer or Assignment of Awards; Issued Shares. Except as expressly provided in the Plan or an Award Agreement, Awards may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(m) Effect on Other Employee Benefit Plans. The value of any Award, as determined upon grant, vesting or settlement, will not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(n) Deferrals. To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals will be made in accordance with the requirements of Section 409A.

(o) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and each Award Agreement will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment may be made in a manner that complies with

Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(p) Choice of Law. This Plan and any controversy arising out of or relating to this Plan will be governed by, and construed in accordance with, the internal laws of the State of California, without regard to conflict of law principles that would result in any application of any law other than the law of the State of California.

10. COVENANTS OF THE COMPANY.

(a) Compliance with Law. The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; *provided, however*, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. ADDITIONAL RULES FOR AWARDS SUBJECT TO SECTION 409A.

(a) Application. Unless the provisions of this Section 11 are expressly superseded by the provisions in an Award Agreement, the provisions of this Section 11 will apply and will supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) Non-Exempt Awards Subject to Non-Exempt Severance Arrangements. To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of this Section 11(b) will apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant's Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date; or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant's Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant's Separation from Service in accordance with the terms of the Non-Exempt Severance Arrangement, but in no event later than the 60th day that follows the date of the Participant's Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares will not be issued before the date that is six months following the date of such Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant's Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award will not accelerate the issuance date of the shares, but the shares will instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant's Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under Treasury Regulations Section 1.409A-3(a)(4).

(c) Treatment of Non-Exempt Awards Upon a Transaction for Employees and Consultants. The provisions of this Section 11(c) will apply and will supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Transaction if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) Vested Non-Exempt Awards. The following provisions will apply to any Vested Non-Exempt Award in connection with a Transaction:

(1) If the Transaction is also a Section 409A Change in Control, then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change in Control, the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control.

(2) If the Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award will be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Transaction.

(ii) Unvested Non-Exempt Awards. The following provisions will apply to any Unvested Non-Exempt Award unless otherwise determined by the Board pursuant to Section 11(e).

(1) In the event of a Transaction, the Acquiring Entity will assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Transaction. The shares to be issued in respect of any Unvested Non-Exempt Award will be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Transaction.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Transaction, then such Award will automatically terminate and be forfeited upon the Transaction with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Transaction, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in Section 11(e)(ii). In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award will be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Transaction.

(3) The foregoing treatment will apply with respect to all Unvested Non-Exempt Awards upon any Transaction, and regardless of whether or not such Transaction is also a Section 409A Change in Control.

(d) Treatment of Non-Exempt Awards Upon a Transaction for Non-Employee Directors. The following provisions of this Section 11(d) will apply and will supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Transaction.

(i) If the Transaction is also a Section 409A Change in Control, then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change in Control, the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control pursuant to the preceding provision.

(ii) If the Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Transaction. The shares to be issued in respect of the Non-Exempt Director Award will be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date,

equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Transaction.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 11(e) will apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award will not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Transaction, to the extent it is required for compliance with the requirements of Section 409A, the Transaction event triggering settlement must also constitute a Section 409A Change in Control. To the extent the terms of a Non-Exempt Award provide that it will be settled upon a termination of employment or termination of Continuous Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also constitute a Separation from Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a "separation from service" such Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares will not be issued before the date that is six months following the date of the Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six month period.

(iv) The provisions in this Section 11(e) for delivery of the shares in respect of the settlement of a RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

12. SEVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. TERMINATION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan will automatically terminate on the day before the tenth anniversary of the earlier of: (i) the Adoption Date; or (ii) the Effective Date. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

14. DEFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

(a) "**Acquiring Entity**" means the surviving or acquiring corporation (or the surviving or acquiring corporation's parent company) in connection with a Transaction.

(b) "**Adoption Date**" means the date the Plan is first approved by the Compensation Committee.

(c) "**Affiliate**" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(d) "**Annual Meeting**" means the first meeting of the Company's stockholders held each calendar year at which Directors are selected.

(e) **“Applicable Law”** means any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).

(f) **“Appreciation Award”** means (i) a stock option or stock appreciation right granted under the Prior Plan or (ii) an Option or SAR, in each case with respect to which the exercise or strike price is at least 100% of the Fair Market Value of the Common Stock subject to the stock option or stock appreciation right, or Option or SAR, as applicable, on the date of grant.

(g) **“Award”** means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a SAR, a Restricted Stock Award, a RSU Award, a Performance Award or any Other Award).

(h) **“Award Agreement”** means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided to a Participant along with the Grant Notice.

(i) **“Board”** means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board will be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination will be final and binding on all Participants.

(j) **“Capitalization Adjustment”** means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Adoption Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(k) **“Cause”** has the meaning ascribed to such term in any written agreement between the Participant and the Company or an Affiliate defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant’s commission of any crime involving fraud, dishonesty or moral turpitude; (ii) such Participant’s attempted commission of, or participation in, a fraud or act of dishonesty against the Company or an Affiliate that results in (or might have reasonably resulted in) material harm to the business of the Company or an Affiliate; (iii) such Participant’s intentional, material violation of any contract or agreement between such Participant and the Company or an Affiliate, or of any statutory duty such Participant owes to the Company or an Affiliate; or (iv) such Participant’s conduct that constitutes gross insubordination, incompetence or habitual neglect of duties and that results in (or might have reasonably resulted in) material harm to the business of the Company or an Affiliate; *provided, however*, that the action or conduct described in clauses (iii) and (iv) above will constitute **“Cause”** only if such action or conduct continues after the Company has provided such Participant with written notice thereof and not less than five business days to cure the same. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are Officers and by the Chief Executive Officer of the Company with respect to Participants who are not Officers. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(l) **“Change in Control”** or **“Change of Control”** means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events; *provided, however*, to the extent necessary to avoid adverse personal income tax consequences to the Participant in connection with an Award, such transaction also constitutes a Section 409A Change in Control:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the **“Subject Person”**) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition

of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur, except for a liquidation into a parent corporation;

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(v) individuals who, on the date the Plan is adopted by the Compensation Committee, are members of the Board (the "**Incumbent Board**") cease for any reason to constitute at least a majority of the members of the Board; *provided, however*, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member will, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Awards subject to such agreement; *provided, however*, that (1) if no definition of Change in Control (or any analogous term) is set forth in such an individual written agreement, the foregoing definition will apply; and (2) no Change in Control (or any analogous term) will be deemed to occur with respect to Awards subject to such an individual written agreement without a requirement that the Change in Control (or any analogous term) actually occur.

(m) "**Code**" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(n) "**Committee**" means the Compensation Committee and any other committee of Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.

(o) "**Common Stock**" means the common stock of the Company.

(p) "**Company**" means Neurocrine Biosciences, Inc., a Delaware corporation.

(q) "**Compensation Committee**" means the Compensation Committee of the Board.

(r) "**Consultant**" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

(s) "**Continuous Service**" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the

Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the Chief Executive Officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or Chief Executive Officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of "separation from service" as defined under Treasury Regulation Section 1.409A-1(h) (without regard to any alternative definition thereunder).

(t) "**Corporate Transaction**" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(u) "**determine**" or "**determined**" means as determined by the Board or the Committee (or its designee) in its sole discretion.

(v) "**Director**" means a member of the Board of Directors of the Company.

(w) "**Disability**" means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(x) "**Effective Date**" means the date of the Annual Meeting in 2020, provided this Plan is approved by the Company's stockholders at such meeting.

(y) "**Employee**" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(z) "**Employer**" means the Company or the Affiliate of the Company that employs the Participant.

(aa) "**Entity**" means a corporation, partnership, limited liability company or other entity.

(bb) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(cc) "**Exchange Act Person**" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary, (ii) any employee benefit plan of the Company or any Subsidiary or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company, or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d))

of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.

(dd) "Fair Market Value" means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(iii) In the absence of such exchange or market for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(ee) "Full Value Award" means (i) a stock award granted under the Prior Plan or (ii) an Award, in each case that is not an Appreciation Award.

(ff) "Governmental Body" means any: (i) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (ii) federal, state, local, municipal, foreign or other government; (iii) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (iv) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).

(gg) "Grant Notice" means the notice provided to a Participant that he or she has been granted an Award and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(hh) "Incentive Stock Option" means an option granted pursuant to Section 4 that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

(ii) "Materially Impair" means that a Participant's rights under an Award will be materially adversely affected by a suspension or termination of the Plan, an amendment of the Plan, or an amendment to the terms of the Award, as applicable. For purposes of the Plan, a Participant's rights under an Award will not be deemed to have been Materially Impaired by any of the foregoing actions if the Board, in its sole discretion, determines that such action, taken as a whole, does not materially impair the Participant's rights under the Award. For example, an amendment to the terms of an Award in order to do any of the following, or that results in any of the following, will not be deemed to Materially Impair the Participant's rights under the Award: (i) an imposition of reasonable restrictions on the minimum number of shares subject to an Option that may be exercised; (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) a change in the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.

(jj) "Non-Employee Director" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("**Regulation S-K**")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K, or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(kk) "Non-Exempt Award" means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, or (ii) the terms of any Non-Exempt Severance Agreement.

(ll) **“Non-Exempt Director Award”** means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(mm) **“Non-Exempt Severance Arrangement”** means a severance arrangement or other agreement between the Participant and the Company or an Affiliate that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant’s termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder) (**“Separation from Service”**) and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(nn) **“Nonstatutory Stock Option”** means any option granted pursuant to Section 4 that does not qualify as an Incentive Stock Option.

(oo) **“Officer”** means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(pp) **“Option”** means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock which is granted pursuant to the terms and conditions of Section 4.

(qq) **“Option Agreement”** means a written agreement between the Company and a Participant evidencing the terms and conditions of an Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.

(rr) **“Other Award”** means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).

(ss) **“Other Award Agreement”** means a written agreement between the Company and a Participant evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(tt) **“Own,” “Owned,” “Owner,” or “Ownership”** means that a person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(uu) **“Participant”** means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(vv) **“Performance Award”** means an Award that may vest or may be exercised, or that may become earned and paid, contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted pursuant to the terms and conditions of Section 5(b) and such terms as approved by the Board.

(ww) “Performance Criteria” means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following, as determined by the Board: (1) earnings (including earnings per share and net earnings, in either case before or after any or all of: interest, taxes, depreciation and amortization, legal settlements or other income (expense), or stock-based compensation, other non-cash expenses and changes in deferred revenue); (2) total stockholder return; (3) return on equity or average stockholder’s equity; (4) return on assets, investment, or capital employed; (5) stock price; (6) margin (including gross margin); (7) income (before or after taxes); (8) operating income; (9) operating income after taxes; (10) pre-tax profit; (11) operating cash flow; (12) sales, prescriptions, or revenue targets; (13) increases in revenue or product revenue; (14) expenses and cost reduction goals; (15) improvement in or attainment of working capital levels; (16) economic value added (or an equivalent metric); (17) market share; (18) cash flow; (19) cash flow per share; (20) cash burn; (21) share price performance; (22) debt reduction; (23) implementation or completion of projects or processes (including, without limitation, discovery of a pre-clinical drug candidate, recommendation of a drug candidate to enter a clinical trial, clinical trial initiation, clinical trial enrollment and dates, clinical trial results, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, presentation of studies and launch of commercial plans, compliance programs or education campaigns); (24) customer satisfaction; (25) stockholders’ equity; (26) capital expenditures; (27) debt levels; (28) financings; (29) operating profit or net operating profit; (30) workforce diversity; (31) growth of net income or operating income; (32) billings; (33) employee hiring; (34) funds from operations; (35) budget management; (36) strategic partnerships or transactions (including acquisitions, joint ventures or licensing transactions); (37) engagement of thought leaders and patient advocacy groups; (38) enhancement of intellectual property portfolio, filing of patent applications and granting of patents; (39) litigation preparation and management; and (40) any other measure of performance selected by the Board.

(xx) “Performance Goals” means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of the Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated Performance Goals; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the U.S. Food and Drug Administration or any other regulatory body. In addition, the Board retains the discretion to define the manner of calculating the Performance Criteria it selects to use for a Performance Period and to reduce or eliminate the compensation or economic benefit due upon the attainment of any Performance Goal. Partial attainment of any Performance Goal may result in payment or vesting corresponding to the degree of attainment as specified in the applicable Award Agreement or the written terms of a Performance Award.

(yy) “Performance Period” means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant’s right to vesting or exercise of, or any payment under, an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(zz) “Plan” means this Neurocrine Biosciences, Inc. 2020 Equity Incentive Plan.

(aaa) “Plan Administrator” means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company’s other equity incentive programs.

(bbb) “Post-Termination Exercise Period” means the period following termination of a Participant’s Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(h).

(ccc) “Prior Plan” means the Neurocrine Biosciences, Inc. 2011 Equity Incentive Plan.

(ddd) “Prior Plan Award” means an award granted under the Prior Plan that is outstanding as of the Effective Date.

(eee) “Prior Plan’s Available Reserve” means the number of shares available for the grant of new awards under the Prior Plan as of immediately following the Effective Date.

(fff) “Prior Plan’s Returning Shares” means shares of Common Stock subject to a Prior Plan Award that following the Effective Date: (i) are not issued because such Prior Plan Award or any portion thereof expires or otherwise terminates without all of the shares covered by such Prior Plan Award having been issued; (ii) are not issued because such Prior Plan Award or any portion thereof is settled in cash; or (iii) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares.

(ggg) “Prospectus” means the document containing the Plan information specified in Section 10(a) of the Securities Act.

(hhh) “Restricted Stock Award” means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(iii) “Restricted Stock Award Agreement” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(jjj) “RSU Award” means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(kkk) “RSU Award Agreement” means a written agreement between the Company and a Participant evidencing the terms and conditions of a RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(lll) “Rule 16b-3” means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(mmm) “Rule 405” means Rule 405 promulgated under the Securities Act.

(nnn) “Section 409A” means Section 409A of the Code and the regulations and other guidance thereunder.

(ooo) “Section 409A Change in Control” means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company’s assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(ppp) “Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(qqq) “Share Reserve” means the number of shares of Common Stock available for issuance under the Plan as set forth in Section 2(a)(i).

(rrr) “SAR” or “Stock Appreciation Right” means a right to receive the appreciation on Common Stock which is granted pursuant to the terms and conditions of Section 4.

(sss) “SAR Agreement” means a written agreement between the Company and a Participant evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided to

a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan.

(ttt) "Subsidiary" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(uuu) "Ten Percent Stockholder" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(vvv) "Trading Policy" means the Company's policy permitting certain individuals to sell Company shares only during certain "window" periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(www) "Transaction" means a Corporate Transaction or a Change in Control.

(xxx) "Unvested Non-Exempt Award" means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Transaction.

(yyy) "Vested Non-Exempt Award" means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Transaction.

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

I, Kevin C. Gorman, Chief Executive Officer of Neurocrine Biosciences, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Neurocrine Biosciences, 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.

Dated: August 1, 2023

/s/ Kevin C. Gorman
Kevin C. Gorman
Chief Executive Officer

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

I, Matthew C. Abernethy, Chief Financial Officer of Neurocrine Biosciences, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Neurocrine Biosciences, 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.

Dated: August 1, 2023

/s/ Matthew C. Abernethy
Matthew C. Abernethy
Chief Financial Officer

**CERTIFICATIONS 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**

In connection with the Quarterly Report of Neurocrine Biosciences, Inc. (Company) on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (Report), I, Kevin C. Gorman, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

August 1, 2023

By: /s/ Kevin C. Gorman
Name: Kevin C. Gorman
Title: Chief Executive Officer

In connection with the Quarterly Report of Neurocrine Biosciences, Inc. (Company) on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (Report), I, Matthew C. Abernethy, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

August 1, 2023

By: /s/ Matthew C. Abernethy
Name: Matthew C. Abernethy
Title: Chief Financial Officer