

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549**

FORM 10-Q

(Mark one)

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

For the quarterly period ended March 31, 2022

or

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

For the transition period from to

Commission file number **001-15771**

ABEONA THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

83-0221517

(I.R.S. Employer I.D. No.)

1330 Avenue of the Americas, 33rd Floor, New York, NY 10019

(Address of principal executive offices, zip code)

(646) 813-4701

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value	ABEO	Nasdaq Capital Markets

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

Non-accelerated filer

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 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 shares outstanding of the registrant's common stock as of May 3, 2022 was 146,949,529 shares.

ABEONA THERAPEUTICS INC.
Form 10-Q
For the Quarter Ended March 31, 2022

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FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains statements that express management's opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Words such as "expects," "anticipates," "intends," "plans," "believes," "could," "would," "seeks," "estimates," and variations of such words and similar expressions, and the negatives thereof, are intended to identify such forward-looking statements. Such "forward-looking statements" speak only as of the date made and are not guarantees of future performance and involve certain risks, uncertainties, estimates, and assumptions by management that are difficult to predict. Various factors, some of which are beyond the Company's control, could cause actual results to differ materially from those expressed in, or implied by, such forward-looking statements. In addition, we disclaim any obligation to update any forward-looking statements to reflect events or circumstances after the date of this report, except as may otherwise be required by the federal securities laws.

Forward-looking statements necessarily involve risks and uncertainties, and our actual results could differ materially from those anticipated in forward-looking statements due to a number of factors. These statements include statements about: our Phase 3 clinical trial (VIITAL™) for patients with recessive dystrophic epidermolysis bullosa ("RDEB") and our beliefs relating thereto; our ability to follow patients in the Phase 3 clinical trial; our plans to continue development of AAV-based gene therapies designed to treat ophthalmic and other diseases and next-generation AAV-based gene therapies; the discontinuation of development activities for our ABO-101 and ABO-102 programs; the potential impacts of the COVID-19 pandemic on our business, operations, and financial condition; the achievement of or expected timing, progress and results of clinical development, clinical trials and potential regulatory approvals; our pipeline of product candidates; our belief that we have sufficient resources on hand, access to additional financial resources and/or financial flexibility to fund operations for at least the next 12 months from the date of filing of this report; our belief that EB-101 could potentially benefit patients with RDEB; our ability to develop our novel AAV-based gene therapy platform technology; our belief in the adequacy of the clinical trial data from our VIITAL™, together with the data generated in the program to date, to support regulatory approvals; our dependence upon our third-party and related-party customers and vendors and their compliance with regulatory bodies; our estimates regarding expenses, future revenues, capital requirements, and needs for additional financing; our intellectual property position and our ability to obtain, maintain and enforce intellectual property protection and exclusivity for our proprietary assets; our estimates regarding the size of the potential markets for our product candidates, the strength of our commercialization strategies and our ability to serve and supply those markets; and future economic conditions or performance.

Important factors that could affect performance and cause results to differ materially from management's expectations are described in the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as updated from time to time in the Company's SEC filings, including this Quarterly Report on Form 10-Q. These factors include: the impact of the COVID-19 pandemic on our business, operations (including our clinical trials), and financial condition, and on our ability to access the capital markets; our ability to regain and maintain compliance with the listing standards of the Nasdaq Capital Market; the successful discontinuation of development activities for our ABO-101 and ABO-102 programs; our ability to successfully execute the Phase 3 clinical trial for patients with RDEB; our ability to find a potential commercialization partner for EB-101; our ability to increase our authorized capital; our ability to access our existing at-the-market sale agreement and any dilution that may result from accessing such sales agreement; our ability to fund our operating expenses and capital expenditure requirements for at least the next 12 months given our existing cash, cash equivalents and short-term investments; our ability to access additional financial resources and/or our financial flexibility to reduce operating expenses if required; our ability to obtain additional equity funding from current or new stockholders, out-licensing technology and/or other assets, deferring and/or eliminating planned expenditures, restructuring operations and/or reducing headcount, and sales of assets; the dilutive effect that raising additional funds by selling additional equity securities would have on the relative equity ownership of our existing investors, including under our existing at-the-market sale agreement; development of our novel AAV-based gene therapy platform technology; the outcome of any interactions with the U.S. Food and Drug Administration ("FDA") or other regulatory agencies relating to any of our products or product candidates; our ability to complete enrollment of patients into clinical trials to secure sufficient data to assess efficacy and safety; our ability to continue to secure and maintain regulatory designations for our product candidates; our ability to develop manufacturing capabilities compliant with current good manufacturing practices for our product candidates; our ability to manufacture cell and gene therapy products and produce an adequate product supply to support clinical trials and potentially future commercialization; the rate and degree of market acceptance of our product candidates for any indication once approved; and our ability to meet our obligations contained in license agreements to which we are party.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Abeona Therapeutics Inc. and Subsidiaries
 Condensed Consolidated Balance Sheets
 (\$ in thousands, except share and per share amounts)

	<u>March 31,</u> <u>2022</u>	<u>December 31,</u> <u>2021</u>
	<u>(Unaudited)</u>	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 20,326	\$ 32,938
Short-term investments	10,989	12,086
Restricted cash	5,891	5,891
Accounts receivable	-	3,000
Prepaid expenses and other current assets	1,998	2,377
Total current assets	<u>39,204</u>	<u>56,292</u>
Property and equipment, net	8,408	12,339
Right-of-use lease assets	7,540	9,403
Licensed technology, net	-	1,384
Other assets	20	168
Total assets	<u>\$ 55,172</u>	<u>\$ 79,586</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,601	\$ 4,325
Accrued expenses	4,206	5,585
Current portion of lease liability	1,822	1,818
Current portion of payable to licensor	4,708	4,599
Deferred revenue	-	296
Total current liabilities	<u>12,337</u>	<u>16,623</u>
Payable to licensor	3,919	3,828
Other long-term liabilities	200	200
Long-term lease liabilities	7,273	7,560
Total liabilities	<u>23,729</u>	<u>28,211</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock - \$0.01 par value; authorized 2,000,000 shares;		
No shares issued and outstanding as of March 31, 2022 and December 31, 2021, respectively	-	-
Common stock - \$0.01 par value; authorized 200,000,000 shares;		
147,079,899 and 147,205,422 shares issued and outstanding as of March 31, 2022 and December 31, 2021, respectively	1,471	1,472
Additional paid-in capital	706,433	705,570
Accumulated deficit	(676,431)	(655,640)
Accumulated other comprehensive loss	(30)	(27)
Total stockholders' equity	<u>31,443</u>	<u>51,375</u>
Total liabilities and stockholders' equity	<u>\$ 55,172</u>	<u>\$ 79,586</u>

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

Abeona Therapeutics Inc. and Subsidiaries
Condensed Consolidated Statements of Operations and Comprehensive Loss
(\$ in thousands, except share and per share amounts)
(Unaudited)

	For the three months ended March 31,	
	<u>2022</u>	<u>2021</u>
Revenues:		
License and other revenues	\$ 346	\$ -
Expenses:		
Research and development	10,545	8,317
General and administrative	4,224	6,280
Licensed technology impairment charge	1,355	-
Lease impairment charge	1,561	-
Construction-in-progress impairment charge	3,252	-
Total expenses	<u>20,937</u>	<u>14,597</u>
Loss from operations	(20,591)	(14,597)
Interest and miscellaneous income	1	15
Interest expense	(201)	(1,420)
Net loss	<u>\$ (20,791)</u>	<u>\$ (16,002)</u>
Basic and diluted loss per common share	<u>\$ (0.14)</u>	<u>\$ (0.17)</u>
Weighted average number of common shares outstanding – basic and diluted	<u>144,877,693</u>	<u>94,234,653</u>
Other comprehensive income:		
Change in unrealized gains related to available-for-sale debt securities	3	13
Comprehensive loss	<u>\$ (20,788)</u>	<u>\$ (15,989)</u>

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

Abeona Therapeutics Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity
(\$ in thousands, except share amounts)
(Unaudited)

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Accumulated Other Comprehensive Income/(Loss)</u>	<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amount</u>				
Balance at December 31, 2021	147,205,422	\$ 1,472	\$ 705,570	\$ (655,640)	\$ (27)	\$ 51,375
Stock-based compensation expense	-	-	862	-	-	862
Issuance of common stock in connection with restricted share awards, net of cancellations	(125,523)	(1)	1	-	-	-
Net loss	-	-	-	(20,791)	-	(20,791)
Other comprehensive income	-	-	-	-	(3)	(3)
Balance at March 31, 2022	<u>147,079,899</u>	<u>\$ 1,471</u>	<u>\$ 706,433</u>	<u>\$ (676,431)</u>	<u>\$ (30)</u>	<u>\$ 31,443</u>
Balance at December 31, 2020	96,131,678	\$ 961	\$ 672,304	\$ (570,704)	\$ (10)	\$ 102,551
Stock-based compensation expense	-	-	1,950	-	-	1,950
Issuance of common stock under open market sale agreement	1,578,324	16	5,195	-	-	5,211
Issuance of common stock in connection with the exercise of stock options	488,204	5	662	-	-	667
Issuance of common stock in connection with restricted share awards, net of cancellations	840,727	8	(8)	-	-	-
Net loss	-	-	-	(16,002)	-	(16,002)
Other comprehensive income	-	-	-	-	13	13
Balance at March 31, 2021	<u>99,038,933</u>	<u>\$ 990</u>	<u>\$ 680,103</u>	<u>\$ (586,706)</u>	<u>\$ 3</u>	<u>\$ 94,390</u>

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

Abeona Therapeutics Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(\$ in thousands)
(Unaudited)

	For the three months ended March 31,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (20,791)	\$ (16,002)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	811	817
Stock-based compensation expense	862	1,950
Non-cash licensed technology impairment charge	1,355	-
Non-cash lease impairment charge	1,561	-
Non-cash construction-in-progress impairment charge	3,252	-
Accretion and interest on short-term investments	(84)	125
Amortization of right-of-use lease assets	302	268
Non cash interest	200	-
Change in operating assets and liabilities:		
Accounts receivable	3,000	-
Prepaid expenses and other current assets	379	882
Other assets	148	(20)
Accounts payable, accrued expenses and lease liabilities	(4,386)	(3,024)
Change in payable to licensor	(296)	1,419
Net cash used in operating activities	<u>(13,687)</u>	<u>(13,585)</u>
Cash flows from investing activities:		
Capital expenditures	(103)	(444)
Purchases of short-term investments	(7,487)	(15,164)
Proceeds from maturities of short-term investments	8,665	24,984
Net cash provided by investing activities	<u>1,075</u>	<u>9,376</u>
Cash flows from financing activities:		
Proceeds from open market sales of common stock	-	5,211
Proceeds from exercise of stock options	-	667
Net cash provided by financing activities	<u>-</u>	<u>5,878</u>
Net increase/(decrease) in cash and cash equivalents	(12,612)	1,669
Cash and cash equivalents at beginning of period	32,938	13,571
Cash and cash equivalents at end of period	<u>\$ 20,326</u>	<u>\$ 15,240</u>
Supplemental cash flow information:		
Cash and cash equivalents	\$ 20,326	\$ 14,265
Restricted cash	5,891	975
Total cash, cash equivalents and restricted cash	<u>\$ 26,217</u>	<u>\$ 15,240</u>

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

ABEONA THERAPEUTICS INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES

Background

Abeona Therapeutics Inc. (together with our subsidiaries, “we,” “our,” “Abeona” or the “Company”), a Delaware corporation, is a clinical-stage biopharmaceutical company developing gene and cell therapies for life-threatening rare genetic diseases. Our lead clinical program is EB-101, an autologous, gene-corrected cell therapy for recessive dystrophic epidermolysis bullosa (“RDEB”), which is currently in the pivotal Phase 3 VIITAL™ clinical trial. Following a comprehensive portfolio review in early 2022, we have decided to focus our research and development resources on the VIITAL™ readout while actively pursuing a potential commercialization partner for EB-101 with the objective of reducing operating expenses and extending our cash runway. As part of this portfolio prioritization, we have intensified our pursuit of a strategic partnership to take over development activities for our adeno-associated virus (“AAV”)-based gene therapy ABO-102 for Sanfilippo syndrome type A (“MPS IIIA”) and we have discontinued development of our AAV-based gene therapy ABO-101 for Sanfilippo syndrome type B (“MPS IIIB”). We plan to continue development of AAV-based gene therapies designed to treat ophthalmic and other diseases and next-generation AAV-based gene therapies using the novel AIM™ capsid platform that we have exclusively licensed from the University of North Carolina at Chapel Hill (“UNC”), and internal AAV vector research programs.

Basis of Presentation

The Company’s unaudited interim condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”). All intercompany balances and transactions have been eliminated in consolidation. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, except as otherwise disclosed, necessary for the fair presentation of the financial position, results of operations, and changes in financial position for such periods, have been made. These unaudited interim condensed financial statement results are not necessarily indicative of results to be expected for the full fiscal year or any future period. Certain information that is normally required by U.S. GAAP has been condensed or omitted in accordance with rules and regulations of the U.S. Securities and Exchange Commission (“SEC”).

Therefore, these unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2021, which was filed with the SEC on March 31, 2022.

Uses and Sources of Liquidity

The unaudited interim condensed consolidated financial statements have been prepared on the going concern basis, which assumes the Company will have sufficient cash to pay its operating expenses, as and when they become payable, for a period of at least 12 months from the date the financial report is issued.

As of March 31, 2022, we had cash, cash equivalents, restricted cash and short-term investments of \$37.2 million. For the three months ended March 31, 2022, we had cash outflows from operations of \$13.7 million. We have not generated significant product revenues and have not achieved profitable operations. There is no assurance that profitable operations will ever be achieved, and, if achieved, could be sustained on a continuing basis. In addition, development activities, clinical and nonclinical testing, and commercialization of our products will require significant additional financing.

We are subject to a number of risks similar to other life science companies, including, but not limited to, risks related to the successful discovery and development of product candidates, obtaining the necessary regulatory approval to market our product candidates, raising additional capital to continue to fund our operations, development of competing drugs and therapies, protection of proprietary technology and market acceptance of our products. As a result of these and other risks and the related uncertainties, there can be no assurance of our future success.

Following a comprehensive portfolio review in early 2022, we have decided to focus our research and development resources on the EB-101 program with the objective of reducing operating expenses and extending our cash runway. As part of this portfolio prioritization, we have intensified our pursuit of a strategic partnership to take over development activities for our AAV-based gene therapy ABO-102 for MPS IIIA and we have discontinued development of our AAV-based gene therapy ABO-101 for MPS IIIB. Based upon these current operating plans, our ability to access additional financial resources and/or our financial flexibility to further reduce operating expenses if required, we believe that we have sufficient resources to fund operations through at least the next 12 months from the date of this Quarterly Report on Form 10-Q. We will need to secure additional funding beyond the next 12 months to carry out all of our planned research and development activities. If we are unable to obtain additional financing or generate license or product revenue, the lack of liquidity and sufficient capital resources could have a material adverse effect on our future prospects.

Use of Estimates

The preparation of unaudited interim condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amount of assets and disclosure of contingent assets and liabilities at the date of the unaudited interim condensed consolidated financial statements and the reported amounts of revenue and expenses during the reported period. Actual results could differ from these estimates and assumptions.

Summary of Significant Accounting Policies

There have been no new or material changes to the significant accounting policies discussed in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 that are of significance, or potential significance, to the Company.

Reclassifications

Certain comparative figures have been reclassified to conform to the current year presentation. The Company reclassified depreciation and amortization costs of \$0.8 million and \$35,000 to research and development and general and administrative expenses, respectively, on the condensed consolidated statements of operations and comprehensive loss during the three months ended March 31, 2021. The Company also reclassified certain rent expenses of \$0.3 million from general and administrative to research and development expenses on the condensed consolidated statements of operations and comprehensive loss during the three months ended March 31, 2021. Additionally, the Company also reclassified \$5.0 million of restricted cash from prepaid expenses, other current assets and restricted cash and \$0.9 million of restricted cash from other assets and restricted cash to restricted cash on the condensed consolidated balance sheets as of December 31, 2021.

Net Loss Per Share

Basic and diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock. We do not include the potential impact of dilutive securities in diluted net loss per share, as the impact of these items is anti-dilutive. Potential dilutive securities result from outstanding restricted stock, stock options, and stock purchase warrants.

The following table sets forth the potential securities that could potentially dilute basic income/(loss) per share in the future that were not included in the computation of diluted net loss per share because to do so would have been anti-dilutive for the periods presented:

	For the three months ended March 31,	
	2022	2021
Stock options	7,101,803	7,091,879
Restricted stock	1,948,334	2,636,216
Warrants	44,700,000	-
Total	<u>53,750,137</u>	<u>9,798,095</u>

NOTE 2 – SHORT-TERM INVESTMENTS

Short-term investments consisted of the following marketable securities as of:

(in thousands)

	March 31, 2022			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Available-for-sale, short-term investments				
U.S. treasury securities	\$ 10,986	\$ 3	\$ -	\$ 10,989
Total	<u>\$ 10,986</u>	<u>\$ 3</u>	<u>\$ -</u>	<u>\$ 10,989</u>

	December 31, 2021			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Available-for-sale, short-term investments				
U.S. treasury securities	\$ 12,077	\$ 9	\$ -	\$ 12,086
Total	<u>\$ 12,077</u>	<u>\$ 9</u>	<u>\$ -</u>	<u>\$ 12,086</u>

As of March 31, 2022, the available-for-sale securities classified as short-term investments mature in one year or less. Unrealized losses on available-for-sale securities as of March 31, 2022 were not significant and were primarily due to changes in interest rates, including market credit spreads, and not due to increased credit risks associated with specific securities. None of the short-term investments have been in a continuous unrealized loss position for more than 12 months. Accordingly, no other-than-temporary impairment was recorded for the three months ended March 31, 2022.

There were no significant realized gains or losses recognized on the sale or maturity of available-for-sale investments for the three months ended March 31, 2022 or 2021.

NOTE 3 – PROPERTY AND EQUIPMENT, NET

Property and equipment are stated at cost and depreciated or amortized using the straight-line method based on useful lives as follow:

(in thousands)	Useful lives (years)	March 31, 2022	December 31, 2021
Laboratory equipment	5	\$ 9,138	\$ 9,081
Furniture, software and office equipment	3 to 5	1,908	1,896
Leasehold improvements	Shorter of remaining lease term or useful life	8,603	8,603
Construction-in-progress		3,252	3,219
Subtotal		22,901	22,799
Less: accumulated depreciation		(11,241)	(10,460)
Less: construction-in-progress impairment		(3,252)	-
Property and equipment, net		<u>\$ 8,408</u>	<u>\$ 12,339</u>

Depreciation expense was \$0.8 million for the three months ended March 31, 2022 and 2021, respectively.

On March 31, 2022, the Company announced that we were pursuing a strategic partner to take over development activities of ABO-102 and that we were discontinuing development of ABO-101. As a result of this shift in priorities, the Company determined the construction-in-progress which was dedicated to the ABO-101 and ABO-102 programs, had no future value and thus, we recorded an impairment charge of \$3.3 million for the three months ended March 31, 2022.

NOTE 4 – LICENSED TECHNOLOGY

On May 15, 2015, we acquired Abeona Therapeutics LLC, which had an exclusive license through Nationwide Children’s Hospital to the AB-101 and AB-102 patent portfolios for developing treatments for patients with Sanfilippo Syndrome Type A and Type B. The license is amortized over the life of the license of 20 years. On March 31, 2022, the Company announced that it was pursuing a strategic partner to take over development activities of ABO-102 and that it was discontinuing development of ABO-101. As a result of this shift in priorities, the Company determined the remaining value of the licensed technology had no future value and thus, recorded an impairment charge of \$1.4 million for the three months ended March 31, 2022.

Licensed technology consists of the following:

<i>(in thousands)</i>	March 31, 2022	December 31, 2021
Licensed technology	\$ 2,156	\$ 2,156
Less accumulated amortization	(801)	(772)
Less impairment charge	(1,355)	-
Licensed technology, net	<u>\$ -</u>	<u>\$ 1,384</u>

Amortization expense on licensed technology was \$29,000 for the three months ended March 31, 2022 and 2021, respectively.

NOTE 5 – SETTLEMENT LIABILITY

On November 12, 2021, we entered into a settlement agreement (“Settlement Agreement”) with our prior licensor, REGENXBIO Inc. (“REGENXBIO”) to resolve all existing disputes between the parties. In accordance with the Settlement Agreement, we agreed to pay REGENXBIO a total of \$30.0 million, payable as follows: (1) \$20.0 million paid in November 2021 after execution of the Settlement Agreement, (2) \$5.0 million on the first anniversary of the effective date of the Settlement Agreement, and (3) \$5.0 million upon the earlier of: (i) the third anniversary of the effective date of the Settlement Agreement or (ii) the closing of a Strategic Transaction, as defined in the Settlement Agreement.

As of March 31, 2022, we recorded the payables due to REGENXBIO in the condensed consolidated balance sheets based on the present value of the remaining payments due to REGENXBIO under the Settlement Agreement using an interest rate of 9.6%. The current portion of the payable due in November 2022 is \$4.7 million and the long-term portion due in November 2024 is \$3.9 million as of March 31, 2022. As of March 31, 2022, we have recorded \$5.0 million of restricted cash in the balance sheet that serves as collateral for the payment owed to REGENXBIO in November 2022.

NOTE 6 – FAIR VALUE MEASUREMENTS

We calculate the fair value of our assets and liabilities that qualify as financial instruments and include additional information in the notes to the consolidated financial statements when the fair value is different than the carrying value of these financial instruments. The estimated fair value of accounts receivable, prepaid expenses and other current assets, other assets, accounts payable, accrued expenses, loan payable, payable to licensor and deferred revenue approximate their carrying amounts due to the relatively short maturity of these instruments.

U.S. GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. This guidance establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 - Quoted prices in active markets for identical assets or liabilities.
- Level 2 - Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar valuation techniques that use significant unobservable inputs.

We have segregated all financial assets and liabilities that are measured at fair value on a recurring basis (at least annually) into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date in the table below.

Financial assets measured at fair value on a recurring and non-recurring basis as of March 31, 2022 and December 31, 2021 are summarized below:

(in thousands)

Description	Fair Value at March 31, 2022	Level 1	Level 2	Level 3
Recurring Assets:				
Cash equivalents				
Money market fund	\$ 16,694	\$ 16,694	\$ -	\$ -
Short-term investments				
U.S. treasury securities	10,989	-	10,989	-
Total assets measured at fair value	\$ 27,683	\$ 16,694	\$ 10,989	\$ -

Description	Fair Value at December 31, 2021	Level 1	Level 2	Level 3
Recurring Assets:				
Cash equivalents				
Money market fund	\$ 28,590	\$ 28,590	\$ -	\$ -
Short-term investments				
U.S. treasury securities	12,086	-	12,086	-
Total recurring assets	40,676	28,590	12,086	-
Non-recurring Assets				
Licensed technology, net	\$ 1,384	\$ -	\$ -	\$ 1,384
Total assets measured at fair value	\$ 42,060	\$ 28,590	\$ 12,086	\$ 1,384

NOTE 7 – ACCRUED EXPENSES

Accrued expenses consisted of the following as of:

	March 31, 2022	December 31, 2021
(in thousands)		
Accrued employee compensation	\$ 745	\$ 1,794
Accrued contracted services and other	3,461	3,091
Accrued sublicense fee owed to licensor	-	700
Accrued expenses	\$ 4,206	\$ 5,585

NOTE 8 – LEASES

We lease space under operating leases for manufacturing and laboratory facilities in Cleveland, Ohio, as well as administrative offices in New York, New York. We also lease office space in Madrid, Spain as well as certain office equipment under operating leases, which have a non-cancelable lease term of less than one year and, therefore, we have elected the practical expedient to exclude these short-term leases from our right-of-use assets and lease liabilities.

On March 31, 2022, the Company announced that we were pursuing a strategic partner to take over development activities of ABO-102 and that we were discontinuing development of ABO-101. As a result of this shift in priorities, the Company determined the portion of the lease which was dedicated to the future facility for the ABO-101 and ABO-102 programs, had no future value and thus, we recorded an impairment charge of \$1.6 million for the three months ended March 31, 2022.

Components of lease cost are as follows:

<i>(in thousands)</i>	For the three months ended March 31,	
	2022	2021
Operating lease cost	\$ 472	\$ 434
Variable lease cost	\$ 96	\$ 135
Short-term lease cost	\$ 21	\$ 5

Maturities of the Company's operating lease liabilities, which do not include short-term leases, as of March 31, 2022 are as follows:

<i>Maturity of lease liabilities:</i>	<i>(in thousands)</i>
2022, remainder	\$ 1,364
2023	1,834
2024	1,879
2025	1,896
2026	871
Thereafter	3,662
Total undiscounted operating lease payments	11,506
Less: imputed interest	2,411
Present value of operating lease liabilities	\$ 9,095

The weighted-average remaining term of the Company's operating leases was 84 months and the weighted-average discount rate used to measure the present value of the Company's operating lease liabilities was 7.3% as of March 31, 2022.

NOTE 9 – STOCK-BASED COMPENSATION

We have two stock-based compensation plans: (1) Abeona Therapeutics Inc. 2015 Equity Incentive Plan (the "2015 Incentive Plan"), which was approved by stockholders on May 7, 2015 and last amended on May 20, 2020 and (2) Abeona Therapeutics Inc. 2005 Equity Incentive Plan (the "2005 Incentive Plan"), under which no further grants can be made.

The following table summarizes stock-based compensation expense for the three months ended March 31, 2022 and 2021:

<i>(in thousands)</i>	For the three months ended March 31,	
	2022	2021
Research and development	\$ 372	\$ 1,155
General and administrative	490	795
Stock based compensation expense	\$ 862	\$ 1,950

Stock Options: We estimate the fair value of each option award on the date of grant using the Black-Scholes option valuation model. We then recognize the grant date fair value of each option as compensation expense ratably using the straight-line attribution method over the service period (generally the vesting period). The Black-Scholes model incorporates the following assumptions:

- Expected volatility - we estimate the volatility of our share price at the date of grant using a “look-back” period which coincides with the expected term, defined below. We believe using a “look-back” period which coincides with the expected term is the most appropriate measure for determining expected volatility.
- Expected term - we estimate the expected term using the “simplified” method, as outlined in Staff Accounting Bulletin No. 107, “Share-Based Payment.”
- Risk-free interest rate - we estimate the risk-free interest rate using the U.S. Treasury yield curve for periods equal to the expected term of the options in effect at the time of grant.
- Dividends - we use an expected dividend yield of zero because we have not declared or paid a cash dividend, nor do we have any plans to declare a dividend.

The Company estimated the fair value of stock options granted in the periods presented utilizing a Black-Scholes option-valuation model utilizing the following assumptions:

	For the three months ended March 31,	
	2022	2021
Expected volatility	95%	99%
Expected term	6.08 years	6.08 years
Risk-free interest rate	1.73%	1.00%
Expected dividend yield	0%	0%

The following table summarizes stock option activity for the 2015 Incentive Plan during the three months ended March 31, 2022 :

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	7,854,851	\$ 1.54	7.63	\$ -
Granted	104,000	\$ 0.26	-	\$ -
Cancelled/forfeited	(937,048)	\$ 1.40	-	\$ -
Exercised	-	\$ -	-	\$ -
Outstanding at March 31, 2022	7,021,803	\$ 1.54	7.24	\$ 6
Exercisable	3,516,716	\$ 1.51	5.49	\$ -
Unvested	3,505,087	\$ 1.57	8.98	\$ 6

The aggregate intrinsic value of options is calculated as the difference between the exercise price of the underlying options and the fair value of the Company’s common stock for those options that had exercise prices lower than the fair value of the Company’s common stock. As of March 31, 2022, the total compensation cost related to non-vested option awards not yet recognized is approximately \$5.0 million with a weighted average remaining vesting period of 2.6 years.

The following table summarizes stock option activity for the 2005 Incentive Plan during the three months ended March 31, 2022 :

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	80,000	\$ 1.28	1.80	\$ -
Cancelled/forfeited	-	\$ -	-	\$ -
Exercised	-	\$ -	-	\$ -
Outstanding at March 31, 2022	80,000	\$ 1.28	1.54	\$ -
Exercisable	80,000	\$ 1.28	1.54	\$ -
Unvested	-	\$ -	-	\$ -

Restricted Stock:

The following table summarizes restricted stock award activity during the three months ended March 31, 2022:

	Number of Awards	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2021	2,431,515	\$ 1.86
Granted	252,000	\$ 0.28
Cancelled/forfeited	(377,523)	\$ 1.58
Vested	(357,658)	\$ 2.31
Outstanding at March 31, 2022	1,948,334	\$ 1.63

As of March 31, 2022, there is approximately \$2.8 million of total unrecognized compensation expense related to unvested restricted stock awards, which is expected to be recognized over a weighted average vesting period of 2.7 years.

NOTE 10 – SUBSEQUENT EVENTS

On April 29, 2022, the Company, entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain institutional investors (the “Investors”), pursuant to which the Company agreed to issue and sell, in a private placement (the “Offering”), 1,000,006 shares of the Company’s Series A Convertible Redeemable Preferred Stock, par value \$0.01 per share (the “Series A Preferred Stock”), and 250,005 shares of the Company’s Series B Convertible Redeemable Preferred Stock, par value \$0.01 per share (the “Series B Preferred Stock,” and together with the Series A Preferred Stock, the “Preferred Stock”), at an offering price of \$19.00 per share, representing a 5% original issue discount (“OID”) to the stated value of \$20.00 per share, for gross proceeds of approximately \$25.0 million in the aggregate for the Offering, before the deduction of discounts, fees and offering expenses. The shares of Preferred Stock will be convertible, at a conversion price of \$0.45 per share (subject in certain circumstances to adjustments), into shares of the Company’s common stock, \$0.01 per share (the “Common Stock”), at the option of the holders and, in certain circumstances, by the Company. The Purchase Agreement contains customary representations, warranties and agreements by the Company and customary conditions to closing. The Offering closed on May 2, 2022.

The Company intends to call a special meeting of stockholders to consider an amendment (the “Amendment”) to the Company’s Restated Certificate of Incorporation (the “Charter”), to effect a reverse stock split of the outstanding shares of Common Stock by a ratio to be determined by the Board of Directors of the Company within a range to be specified in the proposal put to the stockholders for approval of the Amendment (the “Reverse Stock Split”). The Investors have agreed in the Purchase Agreement to not transfer, offer, sell, contract to sell, hypothecate, pledge or otherwise dispose of the shares of the Preferred Stock until the Reverse Stock Split, to vote the shares of the Series A Preferred Stock purchased in the Offering in favor of such Amendment and to vote the shares of the Series B Preferred Stock purchased in the Offering in a manner that “mirrors” the proportions on which the shares of Common Stock (excluding any shares of Common Stock that are not voted) and Series A Preferred Stock are voted on the Reverse Stock Split. The Reverse Stock Split requires the approval of the majority of the votes associated with our outstanding stock entitled to vote on the proposal. Because the Series B Preferred Stock will automatically and without further action of the purchaser be voted in a manner that “mirrors” the proportions on which the shares of Common Stock (excluding any shares of Common Stock that are not voted) and Series A Preferred Stock are voted on the Reverse Stock Split, abstentions by common stockholders will not have any effect on the votes cast by the holders of the Series B Preferred Stock.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis together with our unaudited condensed consolidated financial statements and accompanying notes included elsewhere in this Quarterly Report on Form 10-Q and our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2021 (the "Annual Report"). This discussion and analysis contains forward-looking statements, which involve risks and uncertainties. As a result of many factors, such as those described under "Cautionary Note Regarding Forward-Looking Statements," "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report, our actual results may differ materially from those anticipated in these forward-looking statements.

OVERVIEW

Abeona is a clinical-stage biopharmaceutical company developing cell and gene therapies for life-threatening rare genetic diseases. Our lead clinical program is EB-101, an autologous, gene-corrected cell therapy for recessive dystrophic epidermolysis bullosa ("RDEB"), which is currently in the pivotal Phase 3 VIITAL™ clinical trial. Following a comprehensive portfolio review in early 2022, we have decided to focus our research and development resources on the VIITAL™ readout while actively pursuing a potential commercialization partner for EB-101 with the objective of reducing operating expenses and extending our cash runway. As part of this portfolio prioritization, we have intensified our pursuit of a strategic partnership to take over development activities for our adeno-associated virus ("AAV")-based gene therapy ABO-102 for Sanfilippo syndrome type A ("MPS IIIA") and we have discontinued development of our AAV-based gene therapy ABO-101 for Sanfilippo syndrome type B ("MPS IIIB").

We plan to continue to develop AAV-based gene therapies designed to treat ophthalmic and other diseases and next-generation AAV-based gene therapies using the novel AIM™ capsid platform that we have exclusively licensed from the University of North Carolina at Chapel Hill, and internal AAV vector research programs.

RECENT DEVELOPMENTS

EB-101 (Autologous, Gene-Corrected Cell Therapy) for RDEB

We achieved target enrollment in the first quarter of 2022 for our pivotal Phase 3 VIITAL™ study for our investigational product for RDEB, EB-101. We anticipate topline data readout in the third quarter of 2022. We are focusing our research and development resources on the VIITAL™ readout while actively pursuing a potential commercialization partner. We are optimistic about EB-101's potential based on updated Phase 1/2a results presented at various medical congresses.

We have continued to prepare our current Good Manufacturing Practices ("cGMP") commercial facility in Cleveland, Ohio for manufacturing EB-101 drug product to support our planned Biologics License Application ("BLA") filing. EB-101 study drug product for all our VIITAL™ study participants has been manufactured at our Cleveland facility and we have now completed submission of Module 3 for Chemistry, Manufacturing and Controls ("CMC") describing the in-house production of both retroviral vector and the final drug product to the Investigational New Drug Application ("IND"). Based on feedback from the U.S. Food and Drug Administration ("FDA"), we believe that we have alignment with the FDA on the CMC requirements for EB-101, including characterization and validation plans.

Preclinical Pipeline

While our clinical programs are currently focused on rare diseases, we intend to address larger areas of unmet medical need in the future, and our preclinical programs are investigating novel AAV capsids in five undisclosed ophthalmic conditions each with estimated U.S. prevalence ranging from 5,000 to 15,000 patients. In 2021, we shared data from studies in non-human primates that will help to determine optimal routes of administration and believe we have made significant progress toward measuring efficacy in the preclinical setting. We have also generated appropriate mouse models, produced recombinant capsids, and started dosing mice in proof-of-concept studies that we hope will yield data beginning in mid-2022 to support pre-IND meetings with the FDA.

Preferred Stock Offering

On April 29, 2022, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain institutional investors (the “Investors”), pursuant to which we agreed to issue and sell, in a private placement (the “Offering”), 1,000,006 shares of our Series A Convertible Redeemable Preferred Stock, par value \$0.01 per share (the “Series A Preferred Stock”), and 250,005 shares of our Series B Convertible Redeemable Preferred Stock, par value \$0.01 per share (the “Series B Preferred Stock,” and together with the Series A Preferred Stock, the “Preferred Stock”), at an offering price of \$19.00 per share, representing a 5% original issue discount (“OID”) to the stated value of \$20.00 per share, for gross proceeds of approximately \$25.0 million in the aggregate for the Offering, before the deduction of discounts, fees and offering expenses. The shares of Preferred Stock will be convertible, at a conversion price of \$0.45 per share (subject in certain circumstances to adjustments), into shares of our common stock, \$0.01 per share (the “Common Stock”), at the option of the holders and, in certain circumstances, by us. The Purchase Agreement contains customary representations, warranties and agreements by us and customary conditions to closing. The Offering closed on May 2, 2022.

We intend to call a special meeting of stockholders to consider an amendment (the “Amendment”) to our Restated Certificate of Incorporation (the “Charter”), to effect a reverse stock split of the outstanding shares of Common Stock by a ratio to be determined by our Board of Directors within a range to be specified in the proposal put to the stockholders for approval of the Amendment (the “Reverse Stock Split”). The Investors have agreed in the Purchase Agreement to not transfer, offer, sell, contract to sell, hypothecate, pledge or otherwise dispose of the shares of the Preferred Stock until the Reverse Stock Split, to vote the shares of the Series A Preferred Stock purchased in the Offering in favor of such Amendment and to vote the shares of the Series B Preferred Stock purchased in the Offering in a manner that “mirrors” the proportions on which the shares of Common Stock (excluding any shares of Common Stock that are not voted) and Series A Preferred Stock are voted on the Reverse Stock Split. The Reverse Stock Split requires the approval of the majority of the votes associated with our outstanding stock entitled to vote on the proposal. Because the Series B Preferred Stock will automatically and without further action of the purchaser be voted in a manner that “mirrors” the proportions on which the shares of Common Stock (excluding any shares of Common Stock that are not voted) and Series A Preferred Stock are voted on the Reverse Stock Split, abstentions by common stockholders will not have any effect on the votes cast by the holders of the Series B Preferred Stock.

RESULTS OF OPERATIONS

Comparison of Three Months Ended March 31, 2022 and March 31, 2021

(\$ in thousands)	For the three months ended		Change	
	March 31, 2022	March 31, 2021	\$	%
Revenues:				
License and other revenues	\$ 346	\$ -	\$ 346	N/A
Expenses:				
Research and development	10,545	8,317	2,228	27%
General and administrative	4,224	6,280	(2,056)	-33%
Licensed technology impairment charge	1,355	-	1,355	N/A
Lease impairment charge	1,561	-	1,561	N/A
Construction-in-progress impairment charge	3,252	-	3,252	N/A
Total expenses	20,937	14,597	6,340	43%
Loss from operations	(20,591)	(14,597)	(5,994)	41%
Interest and miscellaneous income	1	15	(14)	-93%
Interest expense	(201)	(1,420)	1,219	-86%
Net loss	\$ (20,791)	\$ (16,002)	\$ (4,789)	30%

N/A - not applicable or not meaningful

License and other revenues

License and other revenues for the three months ended March 31, 2022 was \$0.3 million, as compared to nil for the same period of 2021. The revenue in 2022 consisted mainly of the recognition of deferred revenue related to grants for the MPS IIIA and MPS IIIB development programs.

Research and development

Research and development expenses include, but are not limited to, payroll and personnel expense, lab supplies, preclinical and development costs, clinical trial costs, manufacturing and manufacturing facility costs, costs associated with regulatory approvals, depreciation on lab supplies and manufacturing facilities, and consultant-related expenses.

Total research and development spending for the three months ended March 31, 2022 was \$10.5 million, as compared to \$8.3 million for the same period of 2021, an increase of \$2.2 million. The increase in expenses was primarily due to:

- increased clinical and development work for our cell and gene therapy product candidates and other related costs of \$2.3 million;
- increased salary and related costs of \$0.5 million; and
- increased other costs of \$0.2 million; partially offset by
- decreased stock compensation expenses of \$0.8 million.

We expect our research and development activities to continue as we attempt to advance our product candidates towards potential regulatory approval, reflecting costs associated with the following:

- employee and consultant-related expenses;
- preclinical and developmental costs;
- clinical trial costs;
- the cost of acquiring and manufacturing clinical trial materials; and
- costs associated with regulatory approvals.

General and administrative

General and administrative expenses primarily consist of payroll and personnel costs, office facility costs, public reporting company related costs, professional expenses (i.e., legal expenses) and other general operating expenses not otherwise included in research and development expenses. We expect to continue to incur our general and administrative costs as we seek potential regulatory approval and potential commercialization of our product candidates.

Total general and administrative expenses were \$4.2 million for the three months ended March 31, 2022, as compared to \$6.3 million for the same period of 2021, a decrease of \$2.1 million. The decrease in expenses was primarily due to:

- decreased professional fees of \$1.9 million; and
- decreased non-cash stock-based compensation of \$0.3 million; partially offset by
- increased other costs of \$0.1 million.

Licensed technology impairment charge

Licensed technology impairment charge was \$1.4 million for the three months ended March 31, 2022, as compared to nil in the same period of 2021. The licensed technology was for the MPS IIIA and MPS IIIB development programs and as a result of our shift in priorities, we determined the remaining value of the licensed technology had no future value and thus, we recorded an impairment charge of \$1.4 million for the three months ended March 31, 2022.

Lease impairment charge

Lease impairment charge was \$1.6 million for the three months ended March 31, 2022, as compared to nil in the same period of 2021. The impairment was related to a lease for a future manufacturing facility for the MPS IIIA and MPS IIIB development programs and as a result of our shift in priorities, we determined the remaining value of the portion of this lease had no future value and thus, we recorded an impairment charge of \$1.6 million for the three months ended March 31, 2022.

Construction-in-progress impairment charge

Construction-in-progress impairment charge was \$3.3 million for the three months ended March 31, 2022, as compared to nil in the same period of 2021. The construction-in-progress was for a facility for the MPS IIIA and MPS IIIB development programs. As a result of our shift in priorities, we determined the remaining value of the construction-in-progress facility had no future value and thus, we recorded an impairment charge of \$3.3 million for the three months ended March 31, 2022.

Interest and miscellaneous income

Interest and miscellaneous income was \$1,000 for the three months ended March 31, 2022, as compared to \$15,000 in the same period of 2021. The decrease resulted from lower earnings on short-term investments driven by lower interest rates and a lower average balance of short-term investments.

Interest expense

Interest expense was \$0.2 million for the three months ended March 31, 2022, as compared to \$1.4 million in the same period of 2021. The decrease results primarily from the resolution of a disputed liability owed to our prior licensor, REGENXBIO, Inc.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows for the Three Months Ended March 31, 2022 and 2021

(\$ in thousands)	For the three months ended March 31,	
	2022	2021
Total cash and cash equivalents (used in) /provided by:		
Operating activities	\$ (13,687)	\$ (13,585)
Investing activities	1,075	9,376
Financing activities	-	5,878
Net (decrease)/increase in cash and cash equivalents	\$ (12,612)	\$ 1,669

Operating activities

Net cash used in operating activities was \$13.7 million for the three months ended March 31, 2022, primarily comprised of our net loss of \$20.8 million and decrease in operating assets and liabilities of \$1.2 million, partially offset by net non-cash charges of \$8.3 million.

Net cash used in operating activities was \$13.6 million for the three months ended March 31, 2021, primarily comprised of our net loss of \$16.0 million and decrease in operating assets and liabilities of \$0.7 million, partially offset by net non-cash charges of \$3.1 million

Investing activities

Net cash provided by investing activities was \$1.1 million for the three months ended March 31, 2022, primarily comprised of proceeds from maturities of short-term investments of \$8.7 million, partially offset by purchases of short-term investments of \$7.5 million and capital expenditures of \$0.1 million.

Net cash provided by investing activities was \$9.4 million for the three months ended March 31, 2021, primarily comprised of proceeds from maturities of short-term investments of \$25.0 million, partially offset by purchases of short-term investments of \$15.2 million and capital expenditures of \$0.4 million.

Financing activities

Net cash provided by financing activities was \$5.9 million for the three months ended March 31, 2021, primarily comprised of proceeds of \$5.2 million from open market sales of common stock pursuant to the ATM Agreement (as defined below) and proceeds of \$0.7 million from the exercise of stock options.

We have historically funded our operations primarily through sales of common stock. The COVID-19 pandemic has negatively affected the global economy and created significant volatility and disruption of financial markets. An extended period of economic disruption could negatively affect our business, financial condition, and access to sources of liquidity.

Our principal source of liquidity is cash, cash equivalents, restricted cash and short-term investments, collectively referred to as our cash resources. As of March 31, 2022, our cash resources were \$37.2 million. Following a comprehensive portfolio review in early 2022, we have decided to focus our research and development resources on the EB-101 program with the objective of reducing operating expenses and extending our cash runway. As part of this portfolio prioritization, we have intensified our pursuit of a strategic partnership to take over development activities for our AAV-based gene therapy ABO-102 for MPS IIIA and we have discontinued development of our AAV-based gene therapy ABO-101 for MPS IIIB. Based upon these current operating plans, our ability to access additional financial resources and/or our financial flexibility to further reduce operating expenses if required, we believe that we have sufficient resources to fund operations through at least the next 12 months from the date of this Quarterly Report on Form 10-Q. We will need to secure additional funding beyond the next 12 months to carry out all of our planned research and development activities. If we are unable to obtain additional financing or generate license or product revenue, the lack of liquidity and sufficient capital resources could have a material adverse effect on our future prospects.

On August 17, 2018, we entered into an open market sale agreement with Jefferies LLC. Pursuant to the terms of this agreement, we may sell from time to time, through Jefferies LLC, shares of our common stock for an aggregate sales price of up to \$150 million. Any sales of shares pursuant to this agreement are made under our effective "shelf" registration statement on Form S-3 that is on file with and has been declared effective by the SEC. On November 19, 2021, we entered into an amendment to the agreement (the "Amendment," and as amended, the "ATM Agreement") in connection with the filing of a new shelf registration statement on Form S-3 (File No. 333-256850) (the "Registration Statement"), filed with the SEC on June 7, 2021 and declared effective by the SEC on October 22, 2021. The Amendment amends the ATM Agreement to reflect the filing of the new Registration Statement (due to the prior Form S-3 (File No. 333-224867) expiring in June 2021). We did not sell any shares of our common stock under the ATM Agreement during the three months ended March 31, 2022. Cumulatively, as of March 31, 2022, we have sold an aggregate of 6,758,744 shares of our common stock under the ATM Agreement and received \$25.0 million of net proceeds.

Since our inception, we have incurred negative cash flows from operations and have expended, and expect to continue to expend, substantial funds to complete our planned product development efforts. We have not been profitable since inception and to date have received limited revenues from the sale of products. We expect to incur losses for the next several years as we continue to invest in product research and development, preclinical studies, clinical trials, and regulatory compliance and cannot provide assurance that we will ever be able to generate sufficient product sales or royalty revenue to achieve profitability on a sustained basis, or at all.

If we raise additional funds by selling additional equity securities, the relative equity ownership of our existing investors will be diluted, and the new investors could obtain terms more favorable than previous investors. If we raise additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financing when needed, we may be required to delay, limit, or terminate our product development programs or any future commercialization efforts or grant rights to develop and market product candidates to third parties that we would otherwise prefer to develop and market ourselves.

We are carefully and continually reassessing key business activities and all associated spending decisions. Nonetheless, we are spending necessary funds on manufacturing activities and preclinical studies and clinical trials of potential products, including research and development with respect to our acquired and developed technology. Our future capital requirements and adequacy of available funds depend on many factors, including:

- the impact to our business, operations, and clinical programs from the COVID-19 pandemic and related effects on the U.S. and global economy;
- the successful development and commercialization of our cell and gene therapy and other product candidates;
- the ability to establish and maintain collaborative arrangements with corporate partners for the research, development, and commercialization of products;
- continued scientific progress in our research and development programs;
- the magnitude, scope and results of preclinical testing and clinical trials;
- the costs involved in filing, prosecuting, and enforcing patent claims;
- the costs involved in conducting clinical trials;
- competing technological developments;
- the cost of manufacturing and scale-up;
- the ability to establish and maintain effective commercialization arrangements and activities; and
- the successful outcome of our regulatory filings.

Due to uncertainties and certain of the risks described above, our ability to successfully commercialize our product candidates, our ability to obtain applicable regulatory approval to market our product candidates, our ability to obtain necessary additional capital to fund operations in the future, our ability to successfully manufacture our products and our product candidates in clinical quantities or for commercial purposes, government regulation to which we are subject, the uncertainty associated with preclinical and clinical testing, intense competition that we face, market acceptance of our products, the potential necessity of licensing technology from third parties and protection of our intellectual property, it is not possible to reliably predict future spending or time to completion by project or product category or the period in which material net cash inflows from significant projects are expected to commence. If we are unable to timely complete a particular project, our research and development efforts could be delayed or reduced, our business could suffer depending on the significance of the project and we might need to raise additional capital to fund operations, as discussed in the risks above.

We plan to continue our policy of investing any available funds in suitable certificates of deposit, money market funds, government securities and investment-grade, interest-bearing securities. We do not invest in derivative financial instruments.

Critical Accounting Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts and related disclosures in the financial statements. Management considers an accounting estimate to be critical if:

- it requires assumptions to be made that were uncertain at the time the estimate was made, and
- changes in the estimate or different estimates that could have been selected could have material impact in our results of operations or financial condition.

While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results could differ from those estimates and the differences could be material. For a discussion of the critical accounting estimates that affect the unaudited condensed consolidated financial statements, see “Critical Accounting Estimates” included in Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report.

See Note 1 to our unaudited condensed consolidated financial statements for a discussion of our significant accounting policies.

Recently Issued Accounting Standards Not Yet Effective or Adopted

Management does not believe that any recently issued, but not yet effective accounting pronouncements, if adopted, would have a material impact on the accompanying condensed consolidated financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management and consultants, including the Chief Executive Officer (our principal executive officer) and Chief Financial Officer (our principal financial officer), we have conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (“Disclosure Controls and Procedures”), as of March 31, 2022, as such term is defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

Conclusion of Evaluation — Based on this Disclosure Controls and Procedures evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our Disclosure Controls and Procedures as of March 31, 2022 were effective.

Changes in Internal Control Over Financial Reporting – There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2022 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

None

ITEM 1A. RISK FACTORS

Our business and financial results are subject to numerous risks and uncertainties. As a result, the risks and uncertainties discussed in Part I, Item 1A. Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2021 should be carefully considered. There have been no material changes in the assessment of our risk factors from those set forth in our Annual Report on Form 10-K for the year ended December 31, 2021.

ITEM 6. EXHIBITS

See Exhibit Index below, which is incorporated by reference herein.

Exhibit Index

Exhibits:

- 3.1 [Amended and Restated Certificate of Incorporation of Abeona Therapeutics Inc.](#)
- 3.2 [Amended and Restated Bylaws of Abeona Therapeutics Inc.](#)
- 10.1 [Letter Agreement, dated February 28, 2022, between the Company and Joseph Vazzano.](#)
- 31.1 [Principal Executive Officer Certification Pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934.](#)
- 31.2 [Principal Financial Officer Certification Pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934.](#)
- 32* [Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101 The following materials from Abeona's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, formatted in Inline XBRL (Extensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets at March 31, 2022 and December 31, 2021, (ii) Condensed Consolidated Statements of Operations and Comprehensive Loss for the three months ended March 31, 2022 and 2021, (iii) Condensed Consolidated Statements of Stockholders' Equity for the three months ended March 31, 2022 and 2021, (iv) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2022 and 2021, and (v) Notes to Condensed Consolidated Financial Statements.

* Pursuant to Item 601(b)(32)(ii) of Regulation S-K, this exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filing.

SIGNATURES

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

ABEONA THERAPEUTICS INC.

Date: May 13, 2022

By: /s/ Vishwas Seshadri

Vishwas Seshadri
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 13, 2022

By: /s/ Joseph Vazzano

Joseph Vazzano
Chief Financial Officer
(Principal Financial Officer)

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
ABEONA THERAPEUTICS INC.

Abeona Therapeutics Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

1. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware on June 22, 1989 (the "Original Certificate"), and the original name of the corporation was Chemex-Delaware, Inc.

2. Pursuant to Section 245 of the General Corporation Law of the State of Delaware (the "DGCL"), this Restated Certificate of Incorporation restates and integrates the provisions of the Original Certificate of the Corporation, as previously amended or supplemented.

3. This Restated Certificate of Incorporation does not amend the provisions of the Corporation's Original Certificate, as previously amended or supplemented, and there is no discrepancy between the provisions in this Restated Certificate of Incorporation and the provisions in the Corporation's Original Restated Certificate, as previously amended or supplemented.

4. This Restated Certificate of Incorporation has been duly approved by the Board of Directors of the Corporation in accordance with Sections 245 of the DGCL.

ARTICLE I.

The name of the Corporation is:
Abeona Therapeutics Inc.

ARTICLE II.

A. The address of the initial registered office of the Corporation is 1209 Orange Street, County of New Castle, Wilmington, Delaware 19801.

B. The name of the initial registered agent for the Corporation at such address is the Corporation Trust Company.

ARTICLE III.

The nature of the business of the Corporation and the objects and purposes to be transacted, promoted, and carried on by it are to generally engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of Delaware.

ARTICLE IV.

This Corporation shall have perpetual existence, which existence shall commence upon the filing by the Secretary of State of Delaware of this Certificate of Incorporation.

ARTICLE V.

A. The aggregate number of shares of Common Stock which the Corporation shall have authority to issue is Two Hundred Million (200,000,000) shares with a par value of one cent (\$0.01) per share.

B. The aggregate number of shares of preferred stock which the Corporation shall have authority to issue is Two Million (2,000,000) shares with a par value of one cent (\$0.01) per share in one or more series. Each series of preferred stock shall be designated by the board of directors so as to distinguish the shares thereof and the shares of all other series and classes. The board of directors may, by resolution, from time to time divide shares of the preferred stock into series and fix and determine the number of shares and the relative rights and preferences of any series so established, which relative rights and preferences of any series so established may be greater or lesser than those granted to the common stock as provided herein. Notwithstanding the foregoing, all shares of preferred stock shall be identical, except as to the following relative rights and preferences, in respect of any or all of which there may be variations between different series, namely the rate of dividends (including the date from which dividends shall be cumulative), the price at, and the terms and conditions on which, shares may be redeemed, the amounts payable on shares in the event of voluntary or involuntary liquidation or dissolution, sinking fund provisions for the redemption or purchase of shares in the event shares of any series or issue with sinking fund provisions, and the terms and conditions on which shares of any series may be converted in the event shares of any series are issued a privilege of conversion. Each share of any series of preferred stock shall be identical with all the shares of such series. The consideration for the issuance of shares may be paid in whole or in part in money and other property, tangible or intangible, or in labor or in services actually performed for the Corporation. When payment of the consideration for which shares are to be issued has been received or, when payment of the capital consideration has been received and the Corporation has received a binding obligation from the purchaser to pay the balance of the purchase price; such shares shall be deemed to be fully paid and not liable for any further call or assessment thereon.

C. Each stockholder of record of the common stock shall have one vote for each share of stock standing in his name on the books of the Corporation and entitled to vote. In the election of directors, cumulative voting shall be allowed. The voting rights, if any, of the shareholders of any series, if any, of preferred stock, shall be designated, by resolution, of the board of directors.

D. Stockholders of the common or preferred stock, regardless of the series of the preferred stock shall not have the preemptive right to acquire unissued or treasury shares or securities convertible into such shares or carrying a right to subscribe to or acquire shares. Such provision shall apply to both shares outstanding and to newly issued shares.

ARTICLE VI.

A. Any purchase or other acquisition, directly or indirectly, in one or more transactions, by the Corporation of any shares of the Corporation's Voting Stock or any Voting Stock Right known by the Corporation to be beneficially owned by any Interested Shareholder who has beneficially owned such security or right for less than two years prior to the date of such purchase shall, except as hereinafter expressly provided, require the affirmative vote of the holders of not less than 66 2/3% of all shares entitled to vote. Such affirmative vote shall be required notwithstanding the fact that no vote may be required, or that a lesser percentage may be specified, by law or any agreement with any national securities exchange, or otherwise, but no such affirmative vote shall be required with respect to any purchase or other acquisition by the Corporation of Voting Stock or Voting Stock Right purchased at or below Fair Market Value or made as part of a tender or exchange offer made on the same terms to all holders of such securities and complying with the applicable requirements of the Securities Exchange Act of 1934 (the "Exchange Act") and the rules and regulations thereunder or in a Public Transaction.

B. A majority of the Board of Directors shall have the power and duty to determine for the purposes of this Article VI, on the basis of information known to it after reasonable inquiry, all facts necessary to determine compliance with this Article VI, including without limitation: (i) if (1) a person is an Interested Shareholder; (2) any Voting Stock and Voting Stock Right is beneficially owned by any person; (3) a person is an Affiliate or Associate of another; (4) a transaction is a Public Transaction; and (ii) the Fair Market Value of any Voting Stock or Voting Stock Right.

C. For the purposes of this Article VI, the following terms shall mean:

(i) An “Affiliate” of, or a person “Affiliated” with, a specified person, is a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified.

(ii) The term “Associate” used to indicate a relationship with any person, means: (1) any corporation or organization (other than the Corporation or a Subsidiary of the Corporation) of which such person is an officer, director or partner or is, directly or indirectly, the beneficial owner of 20% or more of any class of voting stock; (2) any trust or other estate in which such person has at least a 20% beneficial interest or as to which such person serves as trustee or in a similar fiduciary capacity; and (3) any relative or spouse of such person, or any relative of such spouse, who has the same residence as such person.

(iii) A person shall “beneficially own” any Voting Stock or Voting Stock Right: (1) which such person or any of its Affiliates or Associates beneficially owns, directly or indirectly; (2) which such person or any of its Affiliates or Associates has (a) the right to acquire (whether such right is exercisable immediately or only after the passage of time), pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise, or (b) any right to vote pursuant to any agreement, arrangement or understanding; or (3) which is beneficially owned, directly or indirectly, by any other person with which such person or any of its Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of any security of any class of the Corporation or any of its Subsidiaries. For the purposes of determining whether a person is an Interested Shareholder, the relevant class of securities outstanding shall be deemed to include all such securities of which such person is deemed to be the “beneficial owner” through application of this subparagraph (iii), but shall not include any other securities of such class which may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise of conversion rights, warrants or options, or otherwise, but are not yet issued.

(iv) “Fair Market Value” means, for any share of Voting Stock or any Voting Stock Right, the average of the closing sale prices during the 90-day period immediately preceding the repurchase of such Voting Stock or any Voting Stock Right, as the case may be, on the Composite Tape for New York Stock Exchange-Listed Stocks, or, if such Voting Stock or any Voting Stock Right is not quoted on the Composite Tape, on the New York Stock Exchange, or, if such Voting Stock or any Voting Stock Right is not listed on such Exchange, on the principal United States securities exchange registered under the Exchange Act on which such Voting Stock or any Voting Stock Right is listed, or if such Voting Stock or any Voting Stock Right is not listed on any such exchange, the average of the closing bid quotations with respect to a share of such Voting Stock or any Voting Stock Right during the 90-day period immediately preceding the date in question of a share of such Voting Stock or any Voting Stock Right quoted by a registered national securities association, or if none of the preceding shall be applicable as determined by the Board of Directors in good faith.

(v) “Interested Shareholder” shall mean any person or group of persons (other than (1) the Corporation, (2) any of its Subsidiaries, (3) any benefit plan or trust of or for the benefit of the Corporation or any of its Subsidiaries, or (4) any trustee, agent or other representative of any of the foregoing) who or which is the beneficial owner, directly or indirectly, of more than 5% of any class of Voting Stock or any Voting Stock Rights.

(vi) A “Public Transaction” shall mean any (1) purchase of shares offered pursuant to an effective registration statement under the Securities Act of 1933, as amended (2) open market purchases of shares if, in either such case, the price and other terms of sale are not negotiated by the purchaser and seller of the beneficial interest in the shares.

(vii) The term “Voting Stock” shall mean stock of any class or series of the Corporation entitled to vote generally in the election of directors.

(viii) The term “Voting Stock Right” shall mean any security convertible into, and any warrant, option or other right of any kind to acquire beneficial ownership of, any Voting Stock, other than securities issued pursuant to any of the Corporation’s employee benefit plans.

D. Notwithstanding anything contained in this Certificate to the contrary, the affirmative vote of the holders of at least 66 2/3% of the shares entitled to vote shall be required to alter, amend, repeal or to adopt any provision inconsistent with this Article VI.

ARTICLE VII.

A. The number of persons constituting the board of directors of the Corporation shall be fixed by the Bylaws of the Corporation. Directors need not be residents of the State of Delaware or stockholders of the Corporation and shall exercise all the powers conferred on the Corporation by this Certificate of Incorporation and by the laws of the State of Delaware. The initial board of directors shall consist of nine (9) members. The use of a written ballot in connection with the election of directors shall not be required.

B. The board of directors shall be divided into three classes as nearly equal in number as possible. At each Annual Meeting of Stockholders the directors whose terms expire shall be elected for a term of office to expire at the third succeeding Annual Meeting of Stockholders.

C. Nominations for the election of directors may be made by the board of directors or by any record owner of capital stock of the Corporation entitled to vote in the election of directors. However, a stockholder may nominate one or more persons for election as a director at a meeting, only if written notice of such stockholder's intent to make such nomination or nominations has been given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Corporation not later than: (i) with respect to an election to be held at an annual meeting of stockholders, one hundred twenty (120) days in advance of such meeting; and (ii) with respect to an election to be held at a special meeting of stockholders for the election of directors, the close of business on the seventh day following the earlier of: (1) the date on which notice of such meeting is first given to stockholders; and (2) the date on which a public announcement of such meeting is first made. Each notice shall include: (i) the name and address of each stockholder of record who intends to appear in person or by proxy to make the nomination and of the person or persons to be nominated; (ii) 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 made by the stockholder; (iii) such other information regarding each nominee proposed by such stockholder as would have been required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission; and (iv) the consent of each nominee to serve as a director of the Corporation if so elected. The chairman of the meeting may refuse to acknowledge the nomination of any person not made in compliance with the foregoing procedure.

D. Any director, or the entire board of directors, may be removed from office at any time, but only for cause and only upon the affirmative vote of the holders of at least 66 2/3% of the shares entitled to vote in the election of directors.

E. Notwithstanding any other provisions of this Certificate of Incorporation or the Bylaws of the Corporation, the affirmative vote of the holders of at least 66 2/3% of the shares entitled to vote shall be required to amend, repeal, or adopt any provisions inconsistent with this Article VII.

ARTICLE VIII.

No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, association, or other organization in which one or more of its directors or officers have any interest, shall be void or voidable solely for that reason or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes, approves, or ratifies the contract or transaction or solely because his or their votes are counted for such purpose if: (i) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes, approves, or ratifies the contract or transaction by the affirmative vote of a majority of the disinterested directors, even though the disinterested directors are less than a quorum; (ii) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically authorized, approved, or ratified in good faith by vote of the stockholders; or (iii) The contract or transaction is fair as to the Corporation as of the time it is authorized, approved, or ratified by the board of directors, a committee thereof, or the stockholders.

Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or a committee thereof which authorizes, approves, or ratifies such contract or transaction.

ARTICLE IX.

The officers of the Corporation shall be subject to the doctrine of corporate opportunities only insofar as it applies to business opportunities in which this Corporation has expressed an interest as determined from time to time by the Corporation's board of directors, as evidenced by resolutions appearing in its minutes. When so delineated, opportunities within such areas of interest shall be disclosed promptly to the board of directors. Until such time as this Corporation, through its board of directors, has designated an area of interest, the officers shall be free to engage in such areas and to continue a business existing prior to the time that such an area of interest has been designated.

ARTICLE X.

A. The Corporation shall indemnify all persons to the extent and in the manner permitted by the provisions of the General Corporation Law of Delaware, as amended from time to time, subject to any permissible expansion or limitation of such indemnification as may be set forth in the Bylaws of the Corporation or any stockholders' or directors' resolution or by contract. The provisions of this Article shall also be applicable to the personal representative and heirs of all persons who may be indemnified pursuant to the General Corporation Law of Delaware.

B. No director of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except for liability for: (i) any breach of the director's duty of loyalty to the Corporation or its stockholders; (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) unlawful payment of dividends or unlawful repurchases or redemptions as more fully described in Section 174 of the General Corporation Law of Delaware; or (iv) any transaction from which the directors derived an improper personal benefit. If the General Corporation Law of Delaware is amended after the filing of this Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of Delaware. Any repeal or modification of the foregoing by the shareholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification.

C. Notwithstanding any other provision of this Certificate of Incorporation, the affirmative vote of at least 66 2/3% of the shares entitled to vote shall be required to alter, amend, repeal or adopt any provision inconsistent with this Article X.

ARTICLE XI.

The Corporation shall be entitled to treat the registered holder of any shares of the Corporation as the owner thereof for all purposes, including all rights derived from such shares, and shall not be bound to recognize any equitable or other claim to or interest in such shares or rights deriving from such shares, on the part of any other persons, including but without limiting the generality thereof, a purchaser, assignee or transferee of such shares or rights deriving from such shares, unless and until such purchaser, assignee or transferee or other person becomes a registered holder of such shares, whether or not the Corporation shall have either actual or constructive notice of the interest of such purchaser, assignee, transferee, or any other person. The purchaser, assignee, or transferee of any of the shares of the Corporation shall not be entitled: (i) To receive notice of the meetings of the stockholders; (ii) To vote at such meetings; (iii) To examine a list of the stockholders; (iv) To be paid dividends or other sums payable to stockholders; or (v) To own, enjoy, and exercise any other privilege or right derived from such shares against the Corporation, until such purchaser, assignee, or transferee has become the registered holder of such shares.

ARTICLE XII.

A. The Corporation's Bylaws may contain any provisions for the regulation and management of the affairs of the Corporation not inconsistent with the laws of Delaware or this Certificate of Incorporation. In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized to adopt, amend or repeal the Bylaws of the Corporation. Notwithstanding the foregoing or any other provisions of this Certificate of Incorporation, and except as otherwise provided by law, the Bylaws may be altered, amended or repealed by the affirmative vote of the holders of at least 66 2/3% of the shares entitled to vote.

B. Notwithstanding any other provision of this Certificate of Incorporation, the affirmative vote of at least 66 2/3% of the shares entitled to vote shall be required to alter, amend, repeal or adopt any provision inconsistent with this Article XII.

ARTICLE XIII.

The right is expressly reserved to amend, alter, change or repeal any provision or provisions contained in this Certificate of Incorporation or any Article herein in any manner or respect now or hereafter permitted or provided by the General Corporation Law of Delaware or by this Certificate of Incorporation, and the rights of all officers, directors and stockholders are expressly made subject to such reservation.

ABEONA THERAPEUTICS INC.
**CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES A CONVERTIBLE REDEEMABLE PREFERRED STOCK**

PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

The undersigned, Joseph Vazzano, does hereby certify that:

1. He is the Chief Financial Officer of Abeona Therapeutics Inc., a Delaware corporation (the "Corporation").
2. The Corporation is authorized to issue 2,000,000 shares of preferred stock, none of which have been issued.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the Restated Certificate of Incorporation of the Corporation (the "Certificate of Incorporation"), provides for a class of its authorized stock known as preferred stock, consisting of 2,000,000 shares, \$0.01 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized by resolution to provide for the issuance of preferred stock in one or more series, and to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as described above, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of 1,000,006 shares of the preferred stock which the Corporation has the authority to issue.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock to be designated "Series A Convertible Redeemable Preferred Stock" and does hereby fix and determine the designation, powers, privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof as follows:

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“Alternate Consideration” shall have the meaning set forth in Section 7(d).

“Amendment” means the amendment to the Corporation’s Certificate of Incorporation to, after the date hereof, effect the Reverse Stock Split.

“Authorized Stockholder Approval” means approval of the Amendment by the holders of a majority in voting power of the then outstanding shares of capital stock of the Corporation entitled to vote on the matter.

“Beneficial Ownership Limitation” shall have the meaning set forth in Section 6(d).

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Buy-In” shall have the meaning set forth in Section 6(c)(iv).

“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 33% of the voting securities of the Corporation (other than by means of the issuance, sale, conversion or exercise of Series A Preferred Stock or Series B Preferred Stock), (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the Corporation or the successor entity of such transaction, (c) the Corporation (and all of its Subsidiaries, taken as a whole) sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date), or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Closing” means the closing of the purchase and sale of the Series A Preferred Stock pursuant to Section 2.1 of the Purchase Agreement.

“Closing Date” means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto and all conditions precedent to (i) each Holder’s obligations to pay the Subscription Amount and (ii) the Corporation’s obligations to deliver the Series A Preferred Stock have been satisfied or waived.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the Corporation’s common stock, \$0.01 par value per share, and stock of any other class of securities into which such securities may hereafter be reclassified, converted or changed.

“Common Stock Equivalents” means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Conversion Amount” means the Stated Value at issue.

“Conversion Date” shall have the meaning set forth in Section 6(a).

“Conversion Price” shall have the meaning set forth in Section 6(b).

“Conversion Shares” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Series A Preferred Stock in accordance with the terms hereof.

“Escrow Agreement” means the escrow agreement to be entered into concurrently with the Purchase Agreement, by and among the Corporation, Wilmington Trust, National Association, and the other party thereto.

“Equity Conditions” means, during the period in question, (a) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Series A Preferred Stock, (b)(i) there is an effective registration statement pursuant to which either (A) the Corporation may issue Conversion Shares or (B) the Holders are permitted to utilize the prospectus thereunder to resell all of the shares of Common Stock issuable pursuant to the Transaction Documents (and the Corporation believes, in good faith, that such effectiveness will continue uninterrupted for the foreseeable future), (ii) all of the Conversion Shares issuable pursuant to the Transaction Documents (and shares issuable in lieu of cash payments of dividends) may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and reasonably acceptable to the Transfer Agent and the affected Holder, or (iii) all of the Conversion Shares may be issued to the Holder pursuant to Section 3(a)(9) of the Securities Act and immediately resold without restriction, (c) the Common Stock is trading on a Trading Market and all of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future), (d) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (e) Authorized Stockholder Approval shall have been received and be effective, (f) the issuance of the shares in question to the applicable Holder would not violate the limitations set forth in Section 6(d) herein, (g) the shares of Common Stock have traded on the applicable Trading Market during a consecutive ten (10) day period at an average market price per share greater than \$2.00 (as adjusted for stock splits) and the average daily trading volume during such period is equal to or greater than \$2,000,000, (h) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated, (i) the applicable Holder is not in possession of any information provided by the Corporation, any of its Subsidiaries, or any of their officers, directors, employees, agents or Affiliates, that constitutes, or may constitute, material non-public information and (j) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Forced Conversion Date” shall have the meaning set forth in Section 8(b).

“Forced Conversion Notice” shall have the meaning set forth in Section 8(b).

“Forced Conversion Notice Date” shall have the meaning set forth in Section 8(b).

“Fundamental Transaction” shall have the meaning set forth in Section 7(d).

“GAAP” means United States generally accepted accounting principles.

“Holder” shall have the meaning given such term in Section 2.

“Liquidation” shall have the meaning set forth in Section 5.

“Mandatory Conversion” shall have the meaning set forth in Section 8(a).

“Mandatory Conversion Date” shall have the meaning set forth in Section 8(a).

“Notice of Conversion” shall have the meaning set forth in Section 6(a).

“Original Issue Date” means the date of the first issuance of any shares of the Series A Preferred Stock regardless of the number of transfers of any particular shares of Series A Preferred Stock and regardless of the number of certificates which may be issued to evidence such Series A Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Purchase Agreement” means the Preferred Stock Purchase Agreement, dated as of April 29, 2022, among the Corporation and the original Holders, as amended, modified or supplemented from time to time in accordance with its terms.

“Reverse Stock Split” means the reverse stock split of the Corporation’s Common Stock that is effected by the Corporation’s filing of the Amendment with and acceptance by the Secretary of State of the State of Delaware.

“Reverse Stock Split Date” means the date on which the Amendment to effectuate the Reverse Stock Split is filed and accepted by the Secretary of State of the State of Delaware.

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

“Series A Preferred Stock” shall have the meaning set forth in Section 2.

“Series B Preferred Stock Certificate of Designation” means the Certificate of Designation of Preferences, Rights and Limitations of the Series B Convertible Redeemable Preferred Stock of the Corporation, dated as of the date hereof.

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2.

“Subscription Amount” shall mean, as to each Holder, the aggregate amount to be paid for the Series A Preferred Stock purchased pursuant to the Purchase Agreement as specified below such Holder’s name on the signature page of the Purchase Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Subsidiary” means any subsidiary of the Corporation as set forth on Schedule 3.1(a) of the Purchase Agreement and shall, where applicable, also include any direct or indirect subsidiary of the Corporation formed or acquired after the date of the Purchase Agreement.

“Successor Entity” shall have the meaning set forth in Section 7(d).

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, or the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction Documents” means this Certificate of Designation, the Series B Preferred Stock Certificate of Designation, the Purchase Agreement, the Registration Rights Agreement, the Escrow Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Purchase Agreement, in each case as amended, modified or supplemented from time to time in accordance with its terms.

“Transfer Agent” means American Stock Transfer & Trust Company, and any successor transfer agent of the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as “Series A Convertible Redeemable Preferred Stock” (the “Series A Preferred Stock”) and the number of shares of such series shall be **1,000,000** (which shall not be subject to increase without the written consent of the holders of a majority of the then outstanding shares of the Series A Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Series A Preferred Stock shall have a par value of \$0.01 per share and a stated value equal to \$20.00 (the “Stated Value”).

Section 3. Dividends. Except for stock dividends or distributions for which adjustments are to be made pursuant to Section 7, Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Series A Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, disregarding for such purpose any conversion limitations hereunder) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends shall be paid on shares of Series A Preferred Stock. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision.

Section 4. Voting Rights.

a) For purposes of determining the presence of a quorum at any meeting of the stockholders of the Corporation at which the shares of Series A Preferred Stock are entitled to vote and the voting power of the shares of Series A Preferred Stock, each holder of outstanding shares of Series A Preferred Stock shall be entitled to a number of votes equal to the number of shares of Common Stock into which such shares of Series A Preferred Stock are then convertible, disregarding, for such purposes, any limitations on conversion set forth herein.

b) Except as otherwise required by the Delaware General Corporation Law or the Certificate of Incorporation (including this Certificate of Designation), each share of Series A Preferred Stock shall be entitled to vote on each matter submitted to a vote of the stockholders generally and shall vote together with the Common Stock and any other class or series of capital stock entitled to vote thereon as a single class and on an as converted to Common Stock basis. Notwithstanding the foregoing, in addition, as long as any shares of Series A Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Series A Preferred Stock, voting as a separate class, (a) alter or change the powers, preferences or rights of the Series A Preferred Stock so as to affect them adversely, (b) amend the Certificate of Incorporation or other charter documents in a manner adverse to the Holders, (c) increase the number of authorized shares of Series A Preferred Stock, or (d) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “Liquidation”), prior and in preference to the Common Stock, the Holders shall be entitled to receive out of the assets available for distribution to stockholders an amount in cash equal to 105% of the Stated Value and no more. The preference set forth in this Section 5 with respect to distributions to the Series A Preferred Stock upon a Liquidation shall apply *mutatis mutandis* to any distributions to be made upon the consummation of a Fundamental Transaction or Change of Control Transaction. The Corporation shall mail written notice of any such Liquidation, Fundamental Transaction or Change of Control Transaction not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

a) Conversions at Option of Holder. Subject to Section 6(d), each share of Series A Preferred Stock shall be convertible, at any time and from time to time only after the Reverse Stock Split Date, at the option of the Holder thereof, into that number of shares of Common Stock determined by dividing the Stated Value of such share of Series A Preferred Stock by the Conversion Price. Holders shall effect conversions by delivering to the Corporation a conversion notice in the form attached hereto as Annex A (a “Notice of Conversion”). Each Notice of Conversion shall specify the number of shares of Series A Preferred Stock to be converted, the number of shares of Series A Preferred Stock owned prior to the conversion at issue, the number of shares of Series A Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers such Notice of Conversion to the Corporation (such date, the “Conversion Date”). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be as of the close of business on the Business Day that such Notice of Conversion is delivered to the Corporation, or if such day is not a Business day or if the Notice of Conversion is delivered after regular business hours, the next Business Day. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. From and after the Conversion Date, until presented for transfer or exchange, certificates that previously represented shares of Series A Preferred Stock shall represent, in lieu of the number of shares of Series A Preferred Stock previously represented by such certificate, the number of shares of Series A Preferred Stock, if any, previously represented by such certificate that were not converted pursuant to the Notice of Conversion, plus the number of shares of Conversion Shares into which the shares of Series A Preferred Stock previously represented by such certificate were converted. To effect conversions of shares of Series A Preferred Stock, a Holder shall not be required to surrender the certificate(s), if any, representing the shares of Series A Preferred Stock to the Corporation unless all of the shares of Series A Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Series A Preferred Stock promptly following the Conversion Date at issue. Shares of Series A Preferred Stock converted into Common Stock shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Series A Preferred Stock shall equal \$0.45, subject to adjustment herein (the "Conversion Price"). In no event shall the Conversion Price be less than the Minimum Price defined in Nasdaq Listing Rule 5635(d).

c) Mechanics of Conversion

- i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder the number of Conversion Shares being acquired upon the conversion of the Series A Preferred Stock, which Conversion Shares shall be free of restrictive legends and trading restrictions. The Corporation shall use its reasonable best efforts to deliver the Conversion Shares required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company or another established clearing corporation performing similar functions. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Corporation's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion.
 - ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.
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iii. Obligation Absolute; Partial Liquidated Damages. Subject to Section 6(d), the Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Series A Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance, which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Series A Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, other than pursuant to Section 6(d), unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Series A Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of the Series A Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, subject to Section 6(d), the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, other than pursuant to Section 6(d), the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Series A Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day after the Share Delivery Date and increasing to \$200 per Trading Day on the sixth Trading Day after the Share Delivery Date) for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

- iv. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Series A Preferred Stock equal to the number of shares of Series A Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Series A Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver the Conversion Shares upon conversion of the shares of Series A Preferred Stock as required pursuant to the terms hereof.
- v. Reservation of Shares Issuable Upon Conversion. From and after the Reverse Stock Split Date and until no shares of Series A Preferred Stock remain outstanding, the Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Series A Preferred Stock as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Series A Preferred Stock), not less than the aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Purchase Agreement) be issuable (taking into account any adjustments under Section 7) upon the conversion of the then outstanding shares of Series A Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.
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- vi. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Series A Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share. Notwithstanding anything to the contrary contained herein, but consistent with the provisions of this subsection with respect to fractional Conversion Shares, nothing shall prevent any Holder from converting fractional shares of Series A Preferred Stock.
 - vii. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of the Series A Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Series A Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.
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d) Beneficial Ownership Limitation. Notwithstanding anything to the contrary set forth herein, the Corporation shall not effect any conversion of the Series A Preferred Stock, and a Holder shall not have the right to convert any portion of the Series A Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Series A Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Series A Preferred Stock) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Series A Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Series A Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Series A Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Series A Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this Section 6(d) and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within one (1) Trading Day confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Series A Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any shares of Series A Preferred Stock, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Series A Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Series A Preferred Stock; provided, that the Beneficial Ownership Limitation shall not in any event exceed 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Series A Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase will not be effective until the 61st day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The Beneficial Ownership Limitation shall not be waived by the Corporation or the Holder and upon issuance of the Series A Preferred Stock by the Corporation, and the purchase thereof by the Holder, in accordance with the Purchase Agreement, each of the Corporation and the Purchaser shall be deemed to acknowledge such limitation and to agree not to waive it. The provisions of this Section 6(d) shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this Section (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this Section shall apply to a successor holder of Series A Preferred Stock.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while the Series A Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions that is payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, the Series A Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification. Notwithstanding the foregoing in no event may the Conversion Price be less than the par value per share of Series A Preferred Stock.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of Common Stock or any class thereof (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Series A Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Distributions. During such time as the Series A Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of the Series A Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Fundamental Transaction. If, at any time while the Series A Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of at least 50% of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of the Series A Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of the Series A Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which the Series A Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of the Series A Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of the Series A Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders’ right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents in accordance with the provisions of this Section 7(d) pursuant to written agreements in customary form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for the Series A Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Series A Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of the Series A Preferred Stock (without regard to any limitations on the conversion of the Series A Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of the Series A Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the “Corporation” shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.

f) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

g) Notice of Holders.

- i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder by facsimile or email a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.
 - ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation (and all of its Subsidiaries, taken as a whole), or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of the Preferred Stock, and shall cause to be delivered by email to each Holder at its last email address as it shall appear upon the stock books of the Corporation, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of the Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.
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Section 8. Mandatory Conversion and Forced Conversion.

a) Mandatory Conversion. Notwithstanding anything herein to the contrary, subject to Section 8(c), on the Reverse Stock Split Date or, if all of the Equity Conditions are not satisfied on the Reverse Stock Split Date, on the first such date after the Reverse Stock Split Date, if and only if such date is within and no later than fifteen (15) Trading Days after the Reverse Stock Split Date, that all of the Equity Conditions are satisfied (unless waived in writing by a Holder with respect to such Holder) (the "Mandatory Conversion Date"), the Corporation may deliver written notice of the Mandatory Conversion to all Holders on the Mandatory Conversion Date and, on such Mandatory Conversion Date, the Corporation shall convert all of each Holder's shares of Series A Preferred Stock (the "Mandatory Conversion") into Conversion Shares at the then effective Conversion Price on the Mandatory Conversion Date, it being agreed that the "Conversion Date" for purposes of Section 6 herein shall be deemed to be the Mandatory Conversion Date. The Mandatory Conversion hereunder shall not be effective, unless all of the Equity Conditions are met (unless waived in writing by a Holder with respect to such Holder) on the Mandatory Conversion Date through and including the Share Delivery Date and the actual delivery of all of the Conversion Shares to the Holders. For purposes of clarification, a Mandatory Conversion shall be subject to all of the provisions of Section 6, including, without limitation, Section 6(d) and the provision requiring payment of liquidated damages. If any of the Equity Conditions shall cease to be satisfied at any time on or after the Mandatory Conversion Date through and including the actual delivery of all of the Conversion Shares to the Holders, a Holder may elect to nullify the Mandatory Conversion as to such Holder by notice to the Corporation within three (3) Trading Days after the first day on which any such Equity Condition has not been satisfied (provided that if, by a provision of the Transaction Documents, the Corporation is obligated to notify the Holders of the non-existence of an Equity Condition, such notice period shall be extended to the second Trading Day after proper notice from the Corporation) in which case the Mandatory Conversion shall be null and void, ab initio. Subject to the other terms hereof, the Corporation covenants and agrees that the Corporation will honor all Notices of Conversion that are tendered by the Holder on or after the Mandatory Conversion Date.

b) Forced Conversion. At any time after 120 days following the Mandatory Conversion Date, the Corporation may deliver a written notice to all Holders (a "Forced Conversion Notice" and the date such notice is delivered to all Holders, the "Forced Conversion Notice Date") to cause each Holder to convert all or part of such Holder's Series A Preferred Stock (as specified in such Forced Conversion Notice) pursuant to Section 6 (a "Forced Conversion"), it being agreed that the "Conversion Date" for purposes of Section 6 shall be deemed to be the Forced Conversion Notice Date (such date, the "Forced Conversion Date"), provided that the Corporation shall not deliver a Forced Conversion Notice more than once in any 60 day period. The Corporation may not deliver a Forced Conversion Notice, and any Forced Conversion Notice delivered by the Corporation shall not be effective, unless all of the Equity Conditions have been met on the Forced Conversion Notice Date through and including the later of the Forced Conversion Date and the Trading Day after the date that the Conversion Shares issuable pursuant to such conversion are actually delivered to the Holders pursuant to the Forced Conversion Notice. Any Forced Conversion Notices shall be applied ratably to all of the Holders based on each Holder's initial purchases of Series A Preferred Stock hereunder, provided that any voluntary conversions by a Holder shall be applied against such Holder's pro rata allocation, thereby decreasing the aggregate amount forcibly converted hereunder if less than all shares of the Series A Preferred Stock are forcibly converted. For purposes of clarification, a Forced Conversion shall be subject to all of the provisions of Section 6, including, without limitation, the provisions requiring payment of liquidated damages and Section 6(d) on Beneficial Ownership Limitation on conversion.

c) Notwithstanding the terms of Sections 8(a) and 8(b) above, if the Corporation exercises its right to cause the conversion of Series A Preferred Stock pursuant to Sections 8(a) or 8(b), then, within two (2) Trading Days following the receipt of a Mandatory Conversion Notice or Forced Conversion Notice, each such Holder shall be entitled to Deliver a Redemption Notice to the Corporation to cause the Corporation to redeem its shares of Series A Preferred Stock otherwise subject to conversion, only to the extent the right to cause such redemption would otherwise be available to such Holder, pursuant to the terms of Section 9(a) below. In the event a Holder delivers a Redemption Notice pursuant to this Section 8(c), any conversion contemplated by the applicable Mandatory Conversion Notice or Forced Conversion Notice shall be null and void, ab initio, and the Corporation shall be obligated to redeem such Holder's Series A Preferred Stock pursuant to Sections 9(a) and 9(b) below.

Section 9. Redemption

a) (i) After the earlier of (1) the receipt of Authorized Stockholder Approval and (2) the date that is 60 days following the Original Issue Date and (ii) before the date that is 90 days after the Original Issue Date, each Holder shall have the right to cause the Corporation to redeem all or part of such Holder's shares of Series A Preferred Stock at a price per share equal to 105% of the Stated Value (the "Redemption Consideration") other than any shares that have theretofore been called for redemption by the Corporation pursuant to Section 9(c) below.

b) Subject to the terms of Section 9(a) above, to cause the Corporation to redeem all or part of its shares of Series A Preferred Stock, each Holder shall deliver written notice to the Corporation (each, a "Redemption Notice") setting forth the number of shares of Series A Preferred Stock that each such Holder wishes to redeem. The Corporation shall redeem the shares of Series A Preferred Stock in accordance with the Redemption Notice, no later than 5 days after the date on which the Redemption Notice is delivered to the Corporation (such date of redemption, the "Redemption Date"). Upon receipt of full payment in cash for a complete redemption, each Holder will promptly submit to the Corporation such Holder's Series A Preferred Stock certificates, if any, and such redeemed shares shall no longer be deemed to be outstanding.

c) At any time after the date that is 90 days after the Original Issue Date, the Corporation shall have the option to redeem any or all shares of Series A Preferred Stock (other than any shares referenced in a Redemption Notice, the redemption of which shall be subject to Section 9(a) and 9(b), or any shares referenced in a Notice of Conversion) at a price per share equal to the Redemption Consideration, subject to the terms and conditions set forth in this Section 9(c). If the Corporation exercises its option to redeem any such shares, it shall effect such redemption on the date specified in a notice, which date shall be at least five (5) Business Days after delivery thereof (the "Call Date"), that shall be sent to each Holder whose shares are to be so redeemed by the Company pursuant hereto (the "Call Notice"). The Call Notice shall state (i) the Call Date and the number of shares of Series A Preferred Stock to be redeemed by the Corporation pursuant to this Section 9(c) on such date and (ii) that the Holder is to surrender to the Corporation, in the manner and at the place designated in the Call Notice, such Holder's certificate or certificates, if any, representing the shares of Series A Preferred Stock to be redeemed pursuant to this Section 9(c). On the Call Date, the Corporation shall redeem the shares of Series A Preferred Stock subject to the Call Notice for the Redemption Consideration. Upon receipt of full payment in cash of the Redemption Consideration for a complete redemption, each Holder will promptly submit to the Corporation such Holder's Series A Preferred Stock certificates, if any, and such redeemed shares shall no longer be deemed to be outstanding.

d) If on the Redemption Date or Call Date, as applicable, the Redemption Consideration for the shares of Series A Preferred Stock to be redeemed on the Redemption Date or the Call Date, as applicable, has been paid to the Holders, then, notwithstanding that any certificate representing any share subject to redemption pursuant to this Section 9 has not been surrendered to the Corporation for cancellation, on the Redemption Date or the Call Date, as applicable, all shares so submitted or called for redemption shall be cancelled, and all rights with respect to such shares shall forthwith on such Redemption Date or Call Date, as applicable, cease and terminate, except for the right of the Holders to receive the Redemption Consideration therefor, without interest.

e) Notwithstanding the terms of Sections 9(c) or Section 9(d) above, if the Corporation exercises its option to redeem shares of Series A Preferred Stock pursuant to Section 9(c), then each such Holder shall continue to be entitled to deliver a Notice of Conversion to the Corporation to cause the Corporation to convert its shares of Series A Preferred Stock otherwise subject to redemption in accordance with Section 6 at any time prior to the Call Date and only to the extent the right to cause such conversion would otherwise be available to such Holder pursuant to the terms of Section 6. In the event a Holder delivers a Notice of Conversion with respect to any of its shares of Series A Preferred Stock pursuant to this Section 9(e), any redemption by the Corporation of such shares contemplated by Section 9(c) shall be null and void, *ab initio*, and the Corporation shall be obligated to convert such Holder's Series A Preferred Stock pursuant to Section 6.

Section 10. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile or email attachment, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at 1330 Avenue of the Americas, 33rd Floor, New York, NY 10019, Attention: Joseph Vazzano, Chief Financial Officer, email address jvazzano@abeonatherapeutics.com, or such other email address or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 10. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by email attachment, or sent by a nationally recognized overnight courier service addressed to each Holder at the email address or address of such Holder appearing on the books of the Corporation, or if no such email address or address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via email attachment at the email address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the time of transmission, if such notice or communication is delivered via email attachment at the email address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Lost or Mutilated Preferred Stock Certificate. If a Holder's Series A Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Series A Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation (which shall not include the posting of any bond).

c) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances.

d) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

e) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

f) Status of Converted or Redeemed Preferred Stock. Shares of Series A Preferred Stock may only be issued pursuant to the Purchase Agreement. If any shares of Series A Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares may not be reissued and shall automatically be retired and cancelled and shall resume the status of authorized but unissued shares of preferred stock.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this 29th day of April 2022.

/s/ Joseph Vazzano

Name: Joseph Vazzano

Title: Chief Financial Officer

ANNEX A

NOTICE OF CONVERSION
(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES
OF SERIES A PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series A Convertible Redeemable Preferred Stock indicated below into shares of common stock, par value \$0.01 per share (the "Common Stock"), of Abeona Therapeutics Inc., a Delaware corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: _____
Number of shares of Preferred Stock owned prior to Conversion: _____
Number of shares of Preferred Stock to be Converted: _____
Stated Value of shares of Preferred Stock to be Converted: _____
Number of shares of Common Stock to be Issued: _____
Applicable Conversion Price: _____
Number of shares of Preferred Stock subsequent to Conversion: _____
Address for Delivery: _____

Or

DWAC Instructions:
Broker no: _____
Account no: _____

HOLDER

By: _____
Name: _____
Title: _____

ABEONA THERAPEUTICS INC.
**CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES B CONVERTIBLE REDEEMABLE PREFERRED STOCK**

PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

The undersigned, Joseph Vazzano, does hereby certify that:

4. He is the Chief Financial Officer of Abeona Therapeutics Inc., a Delaware corporation (the "Corporation").
5. The Corporation is authorized to issue 2,000,000 shares of preferred stock, none of which have been issued.
6. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the Restated Certificate of Incorporation of the Corporation (the "Certificate of Incorporation"), provides for a class of its authorized stock known as preferred stock, consisting of 2,000,000 shares, \$0.01 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized by resolution to provide for the issuance of preferred stock in one or more series, and to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as described above, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of 250,005 shares of the preferred stock which the Corporation has the authority to issue.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock to be designated "Series B Convertible Redeemable Preferred Stock" and does hereby fix and determine the designation, powers, privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof as follows:

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“Alternate Consideration” shall have the meaning set forth in Section 7(d).

“Amendment” means the amendment to the Corporation’s Certificate of Incorporation to, after the date hereof, effect the Reverse Stock Split.

“Authorized Stockholder Approval” means approval of the Amendment by the holders of a majority in voting power of the then outstanding shares of capital stock of the Corporation entitled to vote on the matter.

“Beneficial Ownership Limitation” shall have the meaning set forth in Section 6(d).

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Buy-In” shall have the meaning set forth in Section 6(c)(iv).

“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 33% of the voting securities of the Corporation (other than by means of the issuance, sale, conversion or exercise of Series A Preferred Stock or Series B Preferred Stock), (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the Corporation or the successor entity of such transaction, (c) the Corporation (and all of its Subsidiaries, taken as a whole) sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date), or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Closing” means the closing of the purchase and sale of the Series B Preferred Stock pursuant to Section 2.1 of the Purchase Agreement.

“Closing Date” means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto and all conditions precedent to (i) each Holder’s obligations to pay the Subscription Amount and (ii) the Corporation’s obligations to deliver the Series B Preferred Stock have been satisfied or waived.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the Corporation’s common stock, \$0.01 par value per share, and stock of any other class of securities into which such securities may hereafter be reclassified, converted or changed.

“Common Stock Equivalents” means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Conversion Amount” means the Stated Value at issue.

“Conversion Date” shall have the meaning set forth in Section 6(a).

“Conversion Price” shall have the meaning set forth in Section 6(b).

“Conversion Shares” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock in accordance with the terms hereof.

“Escrow Agreement” means the escrow agreement to be entered into concurrently with the Purchase Agreement, by and among the Corporation, Wilmington Trust, National Association, and the other party thereto.

“Equity Conditions” means, during the period in question, (a) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Series B Preferred Stock, (b)(i) there is an effective registration statement pursuant to which either (A) the Corporation may issue Conversion Shares or (B) the Holders are permitted to utilize the prospectus thereunder to resell all of the shares of Common Stock issuable pursuant to the Transaction Documents (and the Corporation believes, in good faith, that such effectiveness will continue uninterrupted for the foreseeable future), (ii) all of the Conversion Shares issuable pursuant to the Transaction Documents (and shares issuable in lieu of cash payments of dividends) may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and reasonably acceptable to the Transfer Agent and the affected Holder, or (iii) all of the Conversion Shares may be issued to the Holder pursuant to Section 3(a)(9) of the Securities Act and immediately resold without restriction, (c) the Common Stock is trading on a Trading Market and all of the shares of Common Stock issuable upon conversion of the Series B Preferred Stock are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future), (d) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (e) Authorized Stockholder Approval shall have been received and be effective, (f) the issuance of the shares in question to the applicable Holder would not violate the limitations set forth in Section 6(d) herein, (g) the shares of Common Stock have traded on the applicable Trading Market during a consecutive ten (10) day period at an average market price per share greater than \$2.00 (as adjusted for stock splits) and the average daily trading volume during such period is equal to or greater than \$2,000,000, (h) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated, (i) the applicable Holder is not in possession of any information provided by the Corporation, any of its Subsidiaries, or any of their officers, directors, employees, agents or Affiliates, that constitutes, or may constitute, material non-public information and (j) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Forced Conversion Date” shall have the meaning set forth in Section 8(b).

“Forced Conversion Notice” shall have the meaning set forth in Section 8(b).

“Forced Conversion Notice Date” shall have the meaning set forth in Section 8(b).

“Fundamental Transaction” shall have the meaning set forth in Section 7(d).

“GAAP” means United States generally accepted accounting principles.

“Holder” shall have the meaning given such term in Section 2.

“Liquidation” shall have the meaning set forth in Section 5.

“Mandatory Conversion” shall have the meaning set forth in Section 8(a).

“Mandatory Conversion Date” shall have the meaning set forth in Section 8(a).

“Notice of Conversion” shall have the meaning set forth in Section 6(a).

“Original Issue Date” means the date of the first issuance of any shares of the Series B Preferred Stock regardless of the number of transfers of any particular shares of Series B Preferred Stock and regardless of the number of certificates which may be issued to evidence such Series B Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Purchase Agreement” means the Preferred Stock Purchase Agreement, dated as of April 29, 2022, among the Corporation and the original Holders, as amended, modified or supplemented from time to time in accordance with its terms.

“Reverse Stock Split” means the reverse stock split of the Corporation’s Common Stock that is effected by the Corporation’s filing of the Amendment with and acceptance by the Secretary of State of the State of Delaware.

“Reverse Stock Split Date” means the date on which the Amendment to effectuate the Reverse Stock Split is filed and accepted by the Secretary of State of the State of Delaware.

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

“Series A Preferred Stock Certificate of Designation” means the Certificate of Designation of Preferences, Rights and Limitations of the Series A Convertible Redeemable Preferred Stock of the Corporation, dated as of the date hereof.

“Series B Preferred Stock” shall have the meaning set forth in Section 2.

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2.

“Subscription Amount” shall mean, as to each Holder, the aggregate amount to be paid for the Series B Preferred Stock purchased pursuant to the Purchase Agreement as specified below such Holder’s name on the signature page of the Purchase Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Subsidiary” means any subsidiary of the Corporation as set forth on Schedule 3.1(a) of the Purchase Agreement and shall, where applicable, also include any direct or indirect subsidiary of the Corporation formed or acquired after the date of the Purchase Agreement.

“Successor Entity” shall have the meaning set forth in Section 7(d).

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, or the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction Documents” means this Certificate of Designation, the Series B Preferred Stock Certificate of Designation, the Purchase Agreement, the Registration Rights Agreement, the Escrow Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Purchase Agreement, in each case as amended, modified or supplemented from time to time in accordance with its terms.

“Transfer Agent” means American Stock Transfer & Trust Company, and any successor transfer agent of the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as “Series B Convertible Redeemable Preferred Stock” (the “Series B Preferred Stock”) and the number of shares of such series shall be **250,000** (which shall not be subject to increase without the written consent of the holders of a majority of the then outstanding shares of the Series B Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Series B Preferred Stock shall have a par value of \$0.01 per share and a stated value equal to \$20.00 (the “Stated Value”).

Section 3. Dividends. Except for stock dividends or distributions for which adjustments are to be made pursuant to Section 7, Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Series B Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, disregarding for such purpose any conversion limitations hereunder) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends shall be paid on shares of Series B Preferred Stock. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision.

Section 4. Voting Rights.

a) Solely for purposes of determining the presence of a quorum at any meeting of the stockholders of the Corporation at which the shares of Series B Preferred Stock are entitled to vote, the number of shares of Series B Preferred Stock and votes represented by such shares shall be counted on an as converted to Common Stock basis, disregarding, for such purposes, any limitations on conversion set forth herein.

b) Each share of Series B Preferred Stock shall entitle the holder thereof (a) to vote exclusively with respect to the Amendment and the Reverse Stock Split (and the Series B Preferred Stock shall not be entitled to vote on any other matter except to the extent required under the Delaware General Corporation Law or provided herein) and (b) to 15,000 votes per each share of Series B Preferred Stock and shall, except as required by law, vote together with the Common Stock and any other issued and outstanding shares of preferred stock of the Corporation that are entitled to vote thereon, as a single class; provided, that all votes cast by the Series B Preferred Stock with regards to any proposal for the approval of the Amendment and the Reverse Stock Split, when properly cast by the Holder, shall be voted, without further action of such Holder, in the same proportion as shares of Common Stock and any other shares of capital stock that are entitled to vote thereon are voted (excluding any shares of Common Stock that are not voted) on the Amendment and Reverse Stock Split. Notwithstanding the foregoing, in addition, as long as any shares of Series B Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Series B Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock or alter or amend this Certificate of Designation, (b) amend its certificate of incorporation or other charter documents in a manner adverse to the Holders, (c) increase the number of authorized shares of Series B Preferred Stock, or (d) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), prior and in preference to the Common Stock, the Holders shall be entitled to receive out of the assets available for distribution to stockholders an amount in cash equal to 105% of the Stated Value and no more. The preference set forth in this Section 5 with respect to distributions to the Series B Preferred Stock upon a Liquidation shall apply *mutatis mutandis* to any distributions to be made upon the consummation of a Fundamental Transaction or Change of Control Transaction. The Corporation shall mail written notice of any such Liquidation, Fundamental Transaction or Change of Control Transaction not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

a) Conversions at Option of Holder. Subject to Section 6(d), each share of Series B Preferred Stock shall be convertible, at any time and from time to time only after the Reverse Stock Split Date, at the option of the Holder thereof, into that number of shares of Common Stock determined by dividing the Stated Value of such share of Series B Preferred Stock by the Conversion Price. Holders shall effect conversions by delivering to the Corporation a conversion notice in the form attached hereto as Annex A (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Series B Preferred Stock to be converted, the number of shares of Series B Preferred Stock owned prior to the conversion at issue, the number of shares of Series B Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers such Notice of Conversion to the Corporation (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be as of the close of business on the Business Day that such Notice of Conversion is delivered to the Corporation, or if such day is not a Business day or if the Notice of Conversion is delivered after regular business hours, the next Business Day. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. From and after the Conversion Date, until presented for transfer or exchange, certificates that previously represented shares of Series B Preferred Stock shall represent, in lieu of the number of shares of Series B Preferred Stock previously represented by such certificate, the number of shares of Series B Preferred Stock, if any, previously represented by such certificate that were not converted pursuant to the Notice of Conversion, plus the number of shares of Conversion Shares into which the shares of Series B Preferred Stock previously represented by such certificate were converted. To effect conversions of shares of Series B Preferred Stock, a Holder shall not be required to surrender the certificate(s), if any, representing the shares of Series B Preferred Stock to the Corporation unless all of the shares of Series B Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Series B Preferred Stock promptly following the Conversion Date at issue. Shares of Series B Preferred Stock converted into Common Stock shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Series B Preferred Stock shall equal \$0.45, subject to adjustment herein (the "Conversion Price"). In no event shall the Conversion Price be less than the Minimum Price defined in Nasdaq Listing Rule 5635(d).

c) Mechanics of Conversion

- viii. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder the number of Conversion Shares being acquired upon the conversion of the Series B Preferred Stock, which Conversion Shares shall be free of restrictive legends and trading restrictions. The Corporation shall use its reasonable best efforts to deliver the Conversion Shares required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company or another established clearing corporation performing similar functions. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Corporation's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion.
- ix. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.
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- x. Obligation Absolute; Partial Liquidated Damages. Subject to Section 6(d), the Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Series B Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance, which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Series B Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, other than pursuant to Section 6(d), unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Series B Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of the Series B Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, subject to Section 6(d), the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, other than pursuant to Section 6(d), the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Series B Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day after the Share Delivery Date and increasing to \$200 per Trading Day on the sixth Trading Day after the Share Delivery Date) for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.
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- xi. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Series B Preferred Stock equal to the number of shares of Series B Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Series B Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver the Conversion Shares upon conversion of the shares of Series B Preferred Stock as required pursuant to the terms hereof.
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- xii. Reservation of Shares Issuable Upon Conversion. From and after the Reverse Stock Split Date and until no shares of Series B Preferred Stock remain outstanding, the Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Series B Preferred Stock as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Series B Preferred Stock), not less than the aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Purchase Agreement) be issuable (taking into account any adjustments under Section 7) upon the conversion of the then outstanding shares of Series B Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.
- xiii. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Series B Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share. Notwithstanding anything to the contrary contained herein, but consistent with the provisions of this subsection with respect to fractional Conversion Shares, nothing shall prevent any Holder from converting fractional shares of Series B Preferred Stock.
- xiv. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of the Series B Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Series B Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.
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d) Beneficial Ownership Limitation. Notwithstanding anything to the contrary set forth herein, the Corporation shall not effect any conversion of the Series B Preferred Stock, and a Holder shall not have the right to convert any portion of the Series B Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Series B Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Series B Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Series B Preferred Stock) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Series B Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Series B Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Series B Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Series B Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this Section 6(d) and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within one (1) Trading Day confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Series B Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any shares of Series B Preferred Stock, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Series B Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Series B Preferred Stock; provided, that the Beneficial Ownership Limitation shall not in any event exceed 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Series B Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase will not be effective until the 61st day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The Beneficial Ownership Limitation shall not be waived by the Corporation or the Holder and upon issuance of the Series B Preferred Stock by the Corporation, and the purchase thereof by the Holder, in accordance with the Purchase Agreement, each of the Corporation and the Purchaser shall be deemed to acknowledge such limitation and to agree not to waive it. The provisions of this Section 6(d) shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this Section (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this Section shall apply to a successor holder of Series B Preferred Stock.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while the Series B Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions that is payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, the Series B Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification. Notwithstanding the foregoing in no event may the Conversion Price be less than the par value per share of Series B Preferred Stock.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of Common Stock or any class thereof (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Series B Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Distributions. During such time as the Series B Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of the Series B Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Fundamental Transaction. If, at any time while the Series B Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of at least 50% of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of the Series B Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of the Series B Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which the Series B Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of the Series B Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of the Series B Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders’ right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents in accordance with the provisions of this Section 7(d) pursuant to written agreements in customary form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for the Series B Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Series B Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of the Series B Preferred Stock (without regard to any limitations on the conversion of the Series B Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of the Series B Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the “Corporation” shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.

f) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

g) Notice of Holders.

- iii. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder by facsimile or email a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.
 - iv. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation (and all of its Subsidiaries, taken as a whole), or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of the Preferred Stock, and shall cause to be delivered by email to each Holder at its last email address as it shall appear upon the stock books of the Corporation, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of the Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.
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Section 8. Mandatory Conversion and Forced Conversion.

a) Mandatory Conversion. Notwithstanding anything herein to the contrary, subject to Section 8(c), on the Reverse Stock Split Date or, if all of the Equity Conditions are not satisfied on the Reverse Stock Split Date, on the first such date after the Reverse Stock Split Date, if and only if such date is within and no later than fifteen (15) Trading Days after the Reverse Stock Split Date, that all of the Equity Conditions are satisfied (unless waived in writing by a Holder with respect to such Holder) (the "Mandatory Conversion Date"), the Corporation may deliver written notice of the Mandatory Conversion to all Holders on the Mandatory Conversion Date and, on such Mandatory Conversion Date, the Corporation shall convert all of each Holder's shares of Series B Preferred Stock (the "Mandatory Conversion") into Conversion Shares at the then effective Conversion Price on the Mandatory Conversion Date, it being agreed that the "Conversion Date" for purposes of Section 6 herein shall be deemed to be the Mandatory Conversion Date. The Mandatory Conversion hereunder shall not be effective, unless all of the Equity Conditions are met (unless waived in writing by a Holder with respect to such Holder) on the Mandatory Conversion Date through and including the Share Delivery Date and the actual delivery of all of the Conversion Shares to the Holders. For purposes of clarification, a Mandatory Conversion shall be subject to all of the provisions of Section 6, including, without limitation, Section 6(d) and the provision requiring payment of liquidated damages. If any of the Equity Conditions shall cease to be satisfied at any time on or after the Mandatory Conversion Date through and including the actual delivery of all of the Conversion Shares to the Holders, a Holder may elect to nullify the Mandatory Conversion as to such Holder by notice to the Corporation within three (3) Trading Days after the first day on which any such Equity Condition has not been satisfied (provided that if, by a provision of the Transaction Documents, the Corporation is obligated to notify the Holders of the non-existence of an Equity Condition, such notice period shall be extended to the second Trading Day after proper notice from the Corporation) in which case the Mandatory Conversion shall be null and void, ab initio. Subject to the other terms hereof, the Corporation covenants and agrees that the Corporation will honor all Notices of Conversion that are tendered by the Holder on or after the Mandatory Conversion Date.

b) Forced Conversion. At any time after 120 days following the Mandatory Conversion Date, the Corporation may deliver a written notice to all Holders (a "Forced Conversion Notice" and the date such notice is delivered to all Holders, the "Forced Conversion Notice Date") to cause each Holder to convert all or part of such Holder's Series B Preferred Stock (as specified in such Forced Conversion Notice) pursuant to Section 6 (a "Forced Conversion"), it being agreed that the "Conversion Date" for purposes of Section 6 shall be deemed to be the Forced Conversion Notice Date (such date, the "Forced Conversion Date"), provided that the Corporation shall not deliver a Forced Conversion Notice more than once in any 60 day period. The Corporation may not deliver a Forced Conversion Notice, and any Forced Conversion Notice delivered by the Corporation shall not be effective, unless all of the Equity Conditions have been met on the Forced Conversion Notice Date through and including the later of the Forced Conversion Date and the Trading Day after the date that the Conversion Shares issuable pursuant to such conversion are actually delivered to the Holders pursuant to the Forced Conversion Notice. Any Forced Conversion Notices shall be applied ratably to all of the Holders based on each Holder's initial purchases of Series B Preferred Stock hereunder, provided that any voluntary conversions by a Holder shall be applied against such Holder's pro rata allocation, thereby decreasing the aggregate amount forcibly converted hereunder if less than all shares of the Series B Preferred Stock are forcibly converted. For purposes of clarification, a Forced Conversion shall be subject to all of the provisions of Section 6, including, without limitation, the provisions requiring payment of liquidated damages and Section 6(d) on Beneficial Ownership Limitation on conversion.

c) Notwithstanding the terms of Sections 8(a) and 8(b) above, if the Corporation exercises its right to cause the conversion of Series B Preferred Stock pursuant to Sections 8(a) or 8(b), then, within two (2) Trading Days following the receipt of a Mandatory Conversion Notice or Forced Conversion Notice, each such Holder shall be entitled to Deliver a Redemption Notice to the Corporation to cause the Corporation to redeem its shares of Series B Preferred Stock otherwise subject to conversion, only to the extent the right to cause such redemption would otherwise be available to such Holder, pursuant to the terms of Section 9 below. In the event a Holder delivers a Redemption Notice pursuant to this Section 8(c), any conversion contemplated by the applicable Mandatory Conversion Notice or Forced Conversion Notice shall be null and void, ab initio, and the Corporation shall be obligated to redeem such Holder's Series B Preferred Stock pursuant to Section 9.

Section 9. Redemption

a) (i) After the earlier of (1) the receipt of Authorized Stockholder Approval and (2) the date that is 60 days following the Original Issue Date and (ii) before the date that is 90 days after the Original Issue Date (the “Redemption Period”), each Holder shall have the right to cause the Corporation to redeem all or part of such Holder’s shares of Series B Preferred Stock at a price per share equal to 105% of the Stated Value.

b) Subject to the terms of Section 9(a) above, to cause the Corporation to redeem all or part of its shares of Series B Preferred Stock, each Holder shall deliver written notice to the Corporation (each, a “Redemption Notice”) setting forth the number of shares of Series B Preferred Stock that each such Holder wishes to redeem. The Corporation shall redeem the shares of Series B Preferred Stock in accordance with the Redemption Notice, no later than 5 days after the date on which the Redemption Notice is delivered to the Corporation. Upon receipt of full payment in cash for a complete redemption, each Holder will promptly submit to the Corporation such Holder’s Series B Preferred Stock certificates, if any, and such redeemed shares shall no longer be deemed to be outstanding.

Section 10. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile or email attachment, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at 1330 Avenue of the Americas, 33rd Floor, New York, NY 10019, Attention: Joseph Vazzano, Chief Financial Officer, email address jvazzano@abeonatherapeutics.com, or such other email address or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 10. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by email attachment, or sent by a nationally recognized overnight courier service addressed to each Holder at the email address or address of such Holder appearing on the books of the Corporation, or if no such email address or address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via email attachment at the email address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the time of transmission, if such notice or communication is delivered via email attachment at the email address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Lost or Mutilated Preferred Stock Certificate. If a Holder's Series B Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Series B Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation (which shall not include the posting of any bond).

c) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances.

d) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

e) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

f) Status of Converted or Redeemed Preferred Stock. Shares of Series B Preferred Stock may only be issued pursuant to the Purchase Agreement. If any shares of Series B Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares may not be reissued and shall automatically be retired and cancelled and shall resume the status of authorized but unissued shares of preferred stock.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this 29th day of April 2022.

/s/ Joseph Vazzano

Name: Joseph Vazzano

Title: Chief Financial Officer

ANNEX A

NOTICE OF CONVERSION
(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES
OF SERIES B PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series B Convertible Redeemable Preferred Stock indicated below into shares of common stock, par value \$0.01 per share (the "Common Stock"), of Abeona Therapeutics Inc., a Delaware corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: _____
Number of shares of Preferred Stock owned prior to Conversion: _____
Number of shares of Preferred Stock to be Converted: _____
Stated Value of shares of Preferred Stock to be Converted: _____
Number of shares of Common Stock to be Issued: _____
Applicable Conversion Price: _____
Number of shares of Preferred Stock subsequent to Conversion: _____
Address for Delivery: _____

Or

DWAC Instructions:
Broker no: _____
Account no: _____

HOLDER

By: _____
Name: _____
Title: _____

AMENDED AND RESTATED BYLAWS
OF
ABEONA THERAPEUTICS INC.

ARTICLE I.

Offices and Agents

1. Principal Office. The principal office of the Corporation may be located within or without the State of Delaware, as designated by the board of directors. The Corporation may have other offices and places of business at such places within or without the State of Delaware as shall be determined by the directors.
2. Registered Office. The registered office of the Corporation required by the General Corporation Law of Delaware must be maintained in the State of Delaware, and it may be, but need not be, identical with the principal office, if located in the state of Delaware. The address of the registered office of the Corporation may be changed from time to time as provided by the General Corporation Law of Delaware.
3. Registered Agent. The Corporation shall maintain a registered agent in the State of Delaware as required by the General Corporation Law of Delaware. Such registered agent may be changed from time to time as provided by the General Corporation Law of Delaware.

ARTICLE II.

Stockholders Meetings

1. Annual Meetings. Unless otherwise determined by the board of directors, the annual meeting of the stockholders of the Corporation shall be held at a reasonable hour on the second Wednesday of May unless that day be a holiday, in which case said meeting shall be held on the next business day following that day. The annual meeting of the stockholders shall be held for the purpose of electing directors and transacting such other corporate business as may come before the meeting.
 2. Special Meetings. Special meetings of the stockholders of the Corporation may be called at any time by the chairman of the board of directors, if any, by the president or by resolution of the board of directors. The notice or call of a special meeting shall state the purpose or purposes for which the meeting is called.
 3. Place of Meeting. The annual meeting of the stockholders of the Corporation may be held at any place, either within or without the State of Delaware, as may be designated by the board of directors. Except as limited by the following sentence, the person or persons calling any special meeting of the stockholders may designate any place, within or without the State of Delaware, as the place for the meeting. If no designation is made or if a special meeting shall be called other than by the board of directors, the chairman of the board of directors or the president, the place of meeting shall be the principal office of the Corporation. A waiver of notice signed by all stockholders entitled to vote at a meeting may designate any place for such meeting.
 4. Notice of Meeting. Except as otherwise provided in these Bylaws or by the laws of the State of Delaware, written or printed notice stating the place, date and hour of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered either personally or by mail to each stockholder of record entitled to vote at such meeting not less than ten (10) nor more than sixty (60) days before the date of the meeting. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the Corporation. An affidavit of the secretary, assistant secretary, if any, or transfer agent of the Corporation that notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.
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5. Waiver of Notice. Any stockholder, either before, at, or after any stockholders' meeting, may waive notice of the meeting, and his waiver shall be deemed the equivalent of giving notice. Attendance at a stockholders' meeting, either in person or by proxy, by a person entitled to notice thereof shall constitute a waiver of notice of the meeting unless he attends for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business on the ground that the meeting was not lawfully called or convened.

6. Fixing of Record Date. For the purpose of determining stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or 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 of the Corporation may fix, in advance, a record date, which shall not be more than sixty (60) nor less than ten (10) days before the date of the meeting; not more than ten (10) days after the record date for determining shareholders entitled to express consent is fixed; and not more than sixty (60) days prior to the date of any other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting was held; (ii) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting, when no prior action by the board of directors is necessary, shall be the day on which the first written consent is delivered to the Corporation at its principal place of business or such other place as designated by the boards of directors; (iii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto. A determination of stockholders 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.

7. Voting List. The officer or agent who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, or any adjournment thereof, arranged in alphabetical order, showing the address of and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. The stock ledger shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the books of the Corporation or to vote in person or by proxy at any meeting of stockholders.

8. Polls. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting. No ballot, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the inspectors after the closing of the polls unless the Court of Chancery upon application by a stockholder shall determine otherwise.

9. Proxies. Any stockholder entitled to vote at a meeting of the stockholders, or to express consent or dissent to corporate action in writing without meeting may authorize another person or persons to act for him by proxy. No proxy shall be voted or acted upon after three (3) years from the date of its execution unless the proxy expressly provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A proxy may be irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the Corporation generally.

Without limiting the manner in which a stockholder may authorize another person or persons to act for him by proxy, the following shall constitute a valid means by which a stockholder may grant such authority.

A stockholder may execute a writing authorizing another person or persons to act for him as proxy. Execution may be accomplished by the stockholder or his authorized officer, director, employee or agent signing such writing or causing his signature to be affixed to such writing by any reasonable means including but not limited to, by facsimile signature.

A stockholder may authorize another person or persons to act for him as proxy by transmitting or authorizing the transmission of a telegram, cablegram or other means of electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that any such telegram, cablegram or other electronic transmission must either set forth or be submitted with information from which it can be determined that the telegram, cablegram or other electronic transmission was authorized by the stockholder. If it is determined that such telegrams, cablegrams or other electronic transmission are valid, the inspectors or, if there are no inspectors, such other persons making that determination shall specify the information upon which they relied.

Any copy facsimile telecommunication or other reliable reproduction of the writing or transmission created pursuant to this Paragraph 9 may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

10. Voting Rights. Each outstanding share, regardless of class, shall be entitled to one vote, and each fractional share shall be entitled to a corresponding fractional vote on each matter submitted to a vote at a meeting of stockholders except to the extent that the voting rights of the shares of any class or classes are limited or denied by the Certificate of Incorporation.

Persons holding stock in a fiduciary capacity shall be entitled to vote the shares so held. Persons whose stock is pledged shall be entitled to vote, unless in the transfer by the pledgor on the books of the Corporation he has expressly empowered the pledgee to vote thereon, in which case only the pledgee, or his proxy, may represent such stock and vote thereon.

The Corporation's own capital stock belonging to the Corporation or to another corporation, if a majority of the shares entitled to vote in the election or directors of such other corporation is held, directly or indirectly, by the Corporation, shall neither be entitled to vote nor be counted for quorum purposes. Nothing in this section shall be construed as limiting the right of the Corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.

Shares which have been called for redemption shall not be deemed to be outstanding shares for the purpose of voting or determining the total number of shares entitled to vote on any matter on and after the date on which written notice of redemption has been sent to holders thereof and a sum sufficient to redeem such shares has been irrevocably deposited or set aside to pay the redemption price to the holders of the shares upon surrender of certificates there for.

If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the secretary of the Corporation is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (i) if only one (1) votes, his act binds all; (ii) if more than one (1) votes, the act of the majority so voting binds all; (iii) if more than one (1) votes, but the vote is evenly split on any particular matter each faction may vote the securities in question proportionally, or any person voting the shares, or a beneficiary, if any, may apply to the Court of Chancery or such other court as may have jurisdiction to appoint an additional person to act with the persons so voting the shares, which shall then be voted as determined by a majority of such persons and the person appointed by the Court. If the instrument so filed shows that any such tenancy is held in unequal interests, a majority or even split for the purpose of this subsection shall be a majority or even split in interest.

11. Inspectors or Election. Prior to holding any meeting of stockholders, the Corporation shall appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his ability.

The inspectors shall (i) ascertain the number of shares outstanding and the voting power of each; (ii) determine the shares represented at a meeting and the validity of proxies and ballots; (iii) count all votes and ballots; (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in accordance with Article II, Paragraph 9 of these Bylaws, any records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification shall specify the precise information considered by them including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

12. Quorum. Except as otherwise provided in the Certificate of Incorporation, the presence, in person or by proxy, of the holders of one-third of the shares outstanding and entitled to vote shall constitute a quorum at meetings of the stockholders. In all matters, other than the election of directors, the affirmative vote of a majority of the shares present in person or represented by proxy at the meeting and actually voting on the subject matter shall be the act of the stockholders. Directors shall be elected by a majority of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. In the event any stockholders withdraw from a duly organized meeting at which a quorum was initially present, the remaining shares represented shall constitute a quorum for the purpose of continuing to do business, and the affirmative vote of the majority of the remaining shares represented at the meeting and entitled to vote on the subject matter shall be the act of the stockholders unless the vote of a greater number or voting by classes is required by the General Corporation Law of Delaware or the Certificate of Incorporation.

13. Election of Directors. Except as provided in Article III, Section 2, of these Bylaws with respect to the filling of vacancies that occur from time to time on the Board of Directors, a nominee for director shall be elected to the Board of Directors by the vote of the majority of the votes cast by stockholders with respect to that director's election at any meeting of stockholders for the election of directors. For purposes of this Section 13, a majority of votes cast shall mean that the number of shares voted "for" a director's election exceeds fifty percent (50%) of the number of votes cast with respect to that director's election. Votes cast shall include a stockholder's direction to withhold authority in each case and shall exclude abstentions with respect to that director's election. Notwithstanding the foregoing, directors shall be elected by a plurality of the votes cast (and not by majority vote) at any meeting of stockholders where the election of directors is a Contested Election (as defined below). For purposes of these Bylaws, an election of directors shall be considered a "Contested Election" if (i) the number of nominees standing for election at any meeting of stockholders exceeds the number of directors to be elected at such meeting, with the determination that an election is "contested" to be made by the Secretary of the Corporation based on whether one or more notices of nomination, purporting to be in compliance with Article VII, Section C the Certificate of Incorporation, were received by the Secretary of the Corporation (provided that the determination that an election is a "Contested Election" shall not prejudice the ability of the Corporation to challenge whether a notice of nomination has been submitted in accordance with Article VII, Section C the Certificate of Incorporation, as applicable), and (ii) such notice of nomination or notices of nomination have not been withdrawn on or prior to the tenth (10th) calendar day preceding the date the Corporation files with the Securities and Exchange Commission ("SEC") its initial definitive proxy statement relating to such meeting of stockholders such that the number of candidates for election as director no longer exceeds the number of directors to be elected at such meeting (regardless of whether or not such proxy statement is thereafter revised or supplemented). If directors are to be elected by a plurality of the votes cast, stockholders shall not be permitted to vote against a nominee.

Each person who is nominated to stand for election as director, whether such nomination is proposed by the Corporation or a stockholder, shall, as a condition to such nomination, tender an irrevocable and executed letter of resignation in advance of the meeting for the election of directors. If a nominee for director is not elected and the nominee is an incumbent director, the Board's Nominating and Corporate Governance Committee (the "Nominating and Corporate Governance Committee") will make a recommendation to the Board as to whether to accept or reject the tendered resignation, or whether other action should be taken. The Board will act on the tendered resignation, taking into account the Nominating and Corporate Governance Committee's recommendation, and make public disclosure of its decision regarding the tendered resignation and the rationale behind the decision within ninety (90) calendar days from the date of the certification of the election results. The Nominating and Corporate Governance Committee, in making its recommendation, and the Board, in making its decision, may each consider any factors or other information that they consider appropriate and relevant. The director who tenders his or her resignation will not participate in the recommendation of the Nominating and Corporate Governance Committee or the decision of the Board with respect to his or her tender of resignation, but may participate in the recommendation or the decision regarding another director's tender of resignation.

14. Adjournments. If less than a quorum of the outstanding shares entitled to vote is represented at any meeting of the stockholders, a majority of the shares so represented may adjourn the meeting from time to time for a period not to exceed thirty (30) days at any one adjournment, without further notice, provided the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Corporation may transact any business which might have been transacted at the original meeting. Any meeting of the stockholders may adjourn from time to time until its business is completed. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

15. Informal Act by Shareholders. Any action required to be taken at a meeting of shareholders, or any action which may be taken at a meeting of shareholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing 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 shall be delivered to the Corporation by said consent or consents delivered at its principal place of business or such other place as designated by the board of directors. Delivery made to the Corporation shall be by hand or by certified or registered mail, return receipt requested.

ARTICLE III.

Board of Directors

1. Number, Qualifications and Term of Office. Except as otherwise provided in the Certificate of Incorporation or the General Corporation Law of Delaware, the business and affairs of the Corporation shall be managed under the direction of a board of directors consisting of from three to fifteen members. Each director shall be a natural person of the age of fifteen years or older, but does not need to be a resident of the state of Delaware or a stockholder of the Corporation. The board of directors, by resolution, may increase or decrease the number of directors from time to time. Except as otherwise provided in these Bylaws or in the Certificate of Incorporation, the board of directors shall be divided into three (3) classes as nearly equal in number as possible. Each director in each class shall be elected at the appropriate annual meeting of stockholders, as determined by the Certificate of Incorporation, and shall hold office for a term of three (3) years and until his successor is elected and qualified or until his earlier resignation or removal. No decrease in the number of directors shall have the effect of shortening the term of any incumbent director.

2. Vacancies and Newly Created Directorships. 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 shall be filled solely by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. Any directors so chosen shall hold office until the next election of the class for which such director shall have been chosen, and until their successors shall be elected and qualified. No decrease in the number of directors constituting the board of directors shall shorten the term of any incumbent director.

If at any time of filling any vacancy or newly created directorship, the directors then in office shall constitute less than a majority of the whole board, the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent (10%) of the total number of shares 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 Section 211 of the General Corporation Law of Delaware.

Any director may resign at any time by giving written notice to the president or to the secretary of the Corporation. Such resignation shall take effect at the future time specified therein; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective. Any vacancy occurring on the board of directors created by the resignation of a director, may be filled by the affirmative vote of a majority of directors then in office, including those who have so resigned. The vote thereon shall take effect when such resignation or resignations shall become effective. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office.

3. Removal. Any director or the entire board of directors may be removed in accordance with the provisions of Article VII Subparagraph D of the Certificate of Incorporation.

4. Compensation. Any director may be paid any one or more of the following: his expenses, if any, of attendance at meetings; a fixed sum for attendance at each meeting; or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. A director shall also be entitled to receive options for the acquisition of shares of stock of the corporation.

ARTICLE IV.

Meetings of the Board

1. Place of Meetings. The regular or special meetings of the board of directors or any committee designated by the board may be held at the principal office of the Corporation or at any other place within or without the State of Delaware that a majority of the board of directors or any such committee, as the case may be, may designate from time to time by resolution.

2. Regular Meetings. The board of directors shall meet each year immediately after the annual meeting of the stockholders for the purpose of electing officers and transacting such other business as may come before the meeting. The board of directors or any committee designated by the board may provide, by resolution, for the holding of additional regular meetings without other notice than such resolution.

3. Special Meetings. Special meetings of the board of directors or any committee designated by the board may be called at any time by the chairman of the board, if any, by the president or by a majority of the members of the board of directors or any such committee, as the case may be.

4. Notice of Meetings. Notice of the regular meetings of the board of directors or any committee designated by the board need not be given. Except as otherwise provided by these Bylaws or the laws of the State of Delaware, written notice of each special meeting of the board of directors or any such committee setting forth the time and the place of the meeting shall be given to each director not less than two (2) days prior to the time fixed for the meeting. Notice of special meetings may be either given personally, personally by telephone, or by sending a copy of the notice through the United States mail or by telegram, telex or telecopy, charges prepaid, to the address of each director appearing on the books of the Corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail so addressed, with postage prepaid thereon. If notice is given by telegram, telex or telecopy, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph, telex or telecopy operator. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting.

5. Waiver of Notice. A director may in writing waive notice of any special meeting of the board of directors or any committee, either before, at, or after the meeting; and his waiver shall be deemed the equivalent of giving notice. Attendance of a director at a meeting shall constitute waiver of notice of that meeting unless he attends for the express purpose of objecting to the transaction of business because the meeting has not been lawfully called or convened.

6. Quorum. At meetings of the board of directors or any committee designated by the board a majority of the number of directors fixed by these Bylaws or a majority of the members of any such committee, as the case may be, shall be necessary to constitute a quorum for the transaction of business. If a quorum is present, the act of the majority of directors in attendance shall be the act of the board of directors or any such committee, as the case may be, unless the act of a greater number is required by these Bylaws, the Certificate of Incorporation or the General Corporation Law of Delaware. One or more directors may participate in meetings of the board of directors as authorized by Subparagraph 11 of this Article IV by conference telephone, while the remaining director or directors are physically present at the meeting.

7. Presumption of Assent. A director who is present at a meeting of the board or committee designated by the board when corporate action is taken is deemed to have assented to the action taken unless: (i) he objects at the beginning of such meeting to the holding of the meeting or the transacting of business at the meeting; (ii) he contemporaneously requests that his dissent from the action taken be entered in the minutes of such meeting; or (iii) he gives written notice of his dissent to the presiding officer of such meeting before its adjournment or to the secretary of the Corporation immediately after adjournment of such meeting. The right of dissent as to a specific action taken in a meeting of a board or committee thereof is not available to a director who votes in favor of such action.

8. Reliance on Books of Account or Reports. Any member of the board of directors or any committee designated by the board of directors shall, in the performance of his duties, be fully protected in relying in good faith upon the records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers, or employees, or committees of the board of directors, or by any other person as to matters the members reasonably believes are within such other persons professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation, or in relying in good faith upon other records of the Corporation.

9. Committees. The board of directors may, by a resolution passed by a majority of the whole board designate one (1) or more committees, each committee to consist of one (1) or more directors of the corporation. The board may designate one or more directors as alternate members of any committee who may replace any absent or disqualified member at any meeting of the committee. 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 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 such committee to the extent provided in the resolution of the board of directors shall have and may exercise all of the powers and authority of the board of directors in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers which it may acquire. No such committee shall have the power or authority of the board of directors to: (i) amend the Certificate of Incorporation; (ii) adopt an agreement of merger or consolidation; (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; (v) amend the Bylaws of the Corporation; (vi) or unless expressly provided for by resolution, or in the Certificate of Incorporation, declare a dividend, authorize the issuance of stock or to adopt a certificate of ownership and merger. To the extent authorized by resolution or resolutions providing for the issuance of shares of stock, adopted by the board, a committee may: (i) 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 (ii) fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series. If any such delegation of the authority of the board of directors is made as provided herein, all references to the board of directors contained in these Bylaws, the Certificate of Incorporation, the General Corporation Law of Delaware or any other applicable law or regulation relating to the authority so delegated shall be deemed to refer to such committee.

10. Informal Action by Directors. Any action required or permitted to be taken at a meeting of the board of directors or any committee thereof, may be taken without a meeting if all the members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee. Such consent shall have the same force and effect as a unanimous vote of the directors and may be stated as such in any articles or documents filed with the Secretary of State of Delaware under the General Corporation Law of Delaware.

11. Telephonic Meetings. Members of the board of directors or any committee designated by the board may participate in meeting of such board or committee by means of a conference telephone or similar communications equipment by which all persons participating in the meeting can hear each other at the same time. Participation in such a meeting shall constitute presence in person at the meeting.

ARTICLE V.

Officers and Agents

1. General. The executive officers of the Corporation shall be elected annually by the board of directors at the first meeting of the board held after each annual meeting of the stockholders. If the election of such officers shall not be held at such meeting, such election shall take place as soon thereafter as a meeting may conveniently be held. The officers of the Corporation shall consist of a president, a secretary and a treasurer, or a secretary/treasurer; in addition, one or more vice presidents, a chairman of the board of directors and such other officers, assistant officers, agents and employees that the board of directors may from time to time deem necessary may be elected by the board of directors or be appointed in a manner prescribed by the board.

Two or more offices may be held by the same person. Officers shall hold office until their successors are elected and qualified, unless they are sooner removed from office as provided in these Bylaws. All officers of the Corporation shall be natural persons of the age of eighteen years or older. Officers of the Corporation need not be residents of the State of Delaware or directors or stockholders of the Corporation.

2. General Duties. All officers and agents of the Corporation, as between themselves and the Corporation, shall have such authority and shall perform such duties in the management of the Corporation as may be provided in these Bylaws or as may be determined by resolution of the board of directors not inconsistent with these Bylaws. In all cases where the duties of any officer, agent or employee are not prescribed by the Bylaws or by the board of directors, such officer, agent or employee shall follow the orders and instructions of the president.

Any officer shall have the power to execute and deliver on behalf of and in the name of the Corporation any instrument requiring the signature of an officer of the Corporation, except as otherwise provided in these Bylaws or where the execution and delivery thereof shall be expressly delegated by the board of directors to some other officer or agent of the Corporation. Unless authorized to do so by these Bylaws or by the board of directors, no officer, agent or employee shall have any power or authority to bind the Corporation in any way, to pledge its credit or to render it liable pecuniarily for any purpose or in any amount.

3. Vacancies. When a vacancy occurs in one of the executive offices by reason of death, resignation or otherwise, it shall be filled by a resolution of the board of directors. The officer so selected shall hold office until his successor is chosen and qualified.

4. Salaries. The board of directors shall fix the salaries of the officers of the Corporation. The salaries of other agents and employees of the Corporation may be fixed by the board of directors, or by any committee designated by the board or by an officer to whom that function has been delegated by the board. No officer shall be prevented from receiving such salary by reason of the fact that he is also a director of the Corporation.

5. Removal. Any officer or agent of this Corporation may be removed by the board of directors whenever in its judgment the best interests of the Corporation may be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment of an officer or an agent shall not of itself create contract rights.

6. Chairman of the Board. The chairman of the board, if any, shall preside as chairman at meetings of the stockholders and the board of directors. He shall, in addition, have such other duties as the board may prescribe that he perform. At the request of the president, the chairman of the board may, in the case of the president's absence or inability to act, temporarily act in his place. In the case of death of the president or in the case of his absence or inability to act without having designated the chairman of the board to act temporarily in his place, the chairman of the board shall perform the duties of the president, unless the board of directors, by resolution, provides otherwise. If the chairman of the board shall be unable to act in place of the president, any vice president may exercise such powers and perform such duties as provided in section 8 below.

6a. Executive Chairman. The board of directors may from time to time elect or appoint the chairman of the board, if any, to serve as executive chairman. To the extent such position is filled, the executive chairman shall be an executive officer of the Corporation who reports to the board of directors. The executive chairman shall have such powers and duties as the board of directors shall designate from time to time.

6b. Chief Executive Officer. The board of directors shall appoint a chief executive officer, who shall be the Corporation's principal executive officer. All other executive officers, other than the executive chairman, shall report to the chief executive officer. The chief executive officer shall have general and active management and supervision of the business and affairs of the Corporation.

7. President. The president shall be the chief executive officer of the Corporation (unless the board of directors appoints another executive to be the chief executive officer of the Corporation with such duties and responsibilities as the board of directors shall delegate from time to time), and, subject to the control of the board of directors, shall have general supervision of the business and affairs of the Corporation. In the event the position of chairman of the board shall not be occupied or the chairman shall be absent or otherwise unable to act, the president shall preside at meetings of the stockholders and directors and shall discharge the duties of the presiding officer. At each annual meeting of the stockholders the president shall give a report of the business of the Corporation for the preceding fiscal year and shall perform whatever other duties the board of directors may from time to time prescribe. The president may sign, with the secretary or any other proper officer of the Corporation thereunto authorized by the board of directors, certificates for shares of the Corporation, any deeds, mortgages, bonds, contracts, or other instruments which the board of directors has authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the board of directors or by these Bylaws to some other officer or agent of the Corporation, or shall be required by law to be otherwise signed or executed.

8. Vice Presidents. Each vice president shall have such powers and perform such duties as the board of directors may from time to time prescribe or as the president may from time to time delegate to him. At the request of the president, in the case of the president's absence or inability to act, any vice president may temporarily act in his place. In the case of the death of the president, or in the case of his absence or inability to act without having designated a vice president or vice presidents to act temporarily in his place, the board of directors, by resolution, may designate a vice president or vice presidents, to perform the duties of the president. If no such designation shall be made, the chairman of the board of directors, if any, shall exercise such powers and perform such duties, as provided in Section 6 above, but if the Corporation has no chairman of the board of directors, or if the chairman is unable to act in place of the president, all the vice presidents may exercise such powers and perform such duties.

9. Secretary. The secretary shall keep or cause to be kept in books provided for that purpose the minutes of the meetings of the stockholders, executive committee, if any, and any other committees, and of the board of directors; shall see that all notices are duly given in accordance with the provisions of these Bylaws and as required by law; shall be custodian of the records and of the seal of the Corporation and see that the seal is affixed to all documents, the execution of which on behalf of the Corporation under its seal is duly authorized and in accordance with the provisions of these Bylaws; keep a register of the post office address of each stockholder which shall be furnished to the secretary by such stockholder, sign with the president certificates for shares of the Corporation, the issuance of which shall have been authorized by resolution of the board of directors; have a general charge of the stock transfer books of the Corporation; and, in general, shall perform all duties incident to the office of secretary and such other duties as may, from time to time, be assigned to him by the board of directors or by the president. In the absence of the secretary or his inability to act, the assistant secretaries, if any, shall act with the same powers and shall be subject to the same restrictions as are applicable to the secretary.

10. Treasurer. The treasurer shall have custody of corporate funds and securities. He shall keep full and accurate accounts of receipts and disbursements and shall deposit all corporate monies and other valuable effects in the name and to the credit of the Corporation in the depository or depositories of the Corporation selected by the board of directors, and shall render an account of his transactions as treasurer and of the financial condition of the Corporation to the president and/or the board of directors upon request. Such power given to the treasurer to deposit and disburse funds shall not, however, preclude any other officer or employee of the Corporation from also depositing and disbursing funds when authorized to do so by the board of directors. The treasurer shall, if required by the board of directors, give the Corporation a bond in such amount and with such surety or sureties as may be ordered by the board of directors for the faithful performance of duties of his office. The treasurer shall have such other duties as may be from time to time prescribed by the board of directors or the president. In the absence of the treasurer or his inability to act, the assistant treasurers, if any, shall act with the same authority and shall be subject to the same restrictions as are applicable to the treasurer.

11. Delegation of Duties. Whenever an officer is absent, or whenever, for any reason, the board of directors may deem it desirable, the board may delegate the powers and duties of an officer to any other officer or officers or to any director or directors.

12. Bond of Officers. The board of directors may require any officer to give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the board of directors for such terms and conditions as the board of directors may specify, including without limitation for the faithful performance of his duties and for the restoration to the Corporation of all property in his possession or under his control belong to the Corporation.

13. Loans to Director, Officers, Employees. The Corporation may lend money to, guarantee the obligations of and otherwise assist directors, officers and employees of the Corporation, or directors of another corporation of which the Corporation owns a majority of the voting stock to the extent of and in compliance with the General Corporation Laws of Delaware.

ARTICLE VI.

Stock Certificates and the Transfer of Shares

1. Stock Certificates: Uncertificated 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. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the Corporation by the chairman or vice-chairman of the board of directors, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the Corporation representing the number of shares registered in certificate form. Any or all 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 shall have 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 were such officer, transfer agent or registrar at the date of issue.

2. Consideration for Shares. Shares shall be issued for such consideration as shall be fixed from time to time by the board of directors. Consideration for shares shall be expressed in dollars, and shall not be less than the par value or stated value therefor, as the case may be. The par value for shares, if any, shall be stated in the Certificate of Incorporation, and the stated value for shares, if any, shall be fixed from time to time by the board of directors. Treasury shares may be disposed of by the Corporation for such consideration expressed in dollars as may be fixed from time to time by the board. Consideration for shares may consist, in whole or in part, of money, other property whether tangible, intangible or both, or in labor or services actually performed for the Corporation, but the promise of future services of a subscriber or direct purchaser of shares from the Corporation shall not constitute payment or part payment for shares.

3. Lost Certificates. The board of directors may direct a new certificate of stock or uncertificated share in place of any certificate issued by it, alleged to have been lost, stolen or destroyed if the owner makes an affidavit or affirmation of that fact and produces such evidence of loss or destruction as the board may require. The board, in its discretion, may as a condition precedent to the issuance of a new certificate require the owner to give the Corporation a bond sufficient to indemnify it against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of the certificate or the issuance of such new certificate.

4. Transfer of Shares. Shares of the Corporation shall only be transferred on its books upon the surrender to the Corporation of the share certificates duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer and such documentary stamps as may be required by law. In that event, the surrendered certificates shall be cancelled, new certificates issued to the persons entitled to them, and the transaction recorded on the books of the Corporation.

5. Registered Stockholders. The Corporation shall be entitled to treat the holder of record of shares as the holder in fact and, except as otherwise provided by the laws of Delaware, shall not be bound to recognize any equitable or other claim to or interest in the shares.

The board of directors may adopt by resolution a procedure whereby a stockholder may certify in writing to the Corporation that all or a portion of the shares registered in the name of such stockholder are held for the account of a specified person or persons. Such resolution shall set forth: (i) the classification of stockholder who may certify; (ii) the purpose or purposes for which the certification may be made; (iii) the form of certification and information to be contained therein; (iv) if the certification is with respect to a record date or closing of the stock transfer books within which the certification must be received by the Corporation; and (v) such other provisions with respect to the procedure as are deemed necessary or desirable.

Upon receipt by the Corporation of a certification complying with the procedure, the persons specified in the certification shall be deemed, for the purpose or purposes set forth in the certification, to be the holders of record of the number of shares specified in place of the stockholder making the certification.

6. Stock Ledger. An appropriate stock journal and ledger shall be kept by the secretary or such registrars or transfer agents as the directors by resolution may appoint in which all transactions in the shares of stock of the Corporation shall be recorded.

7. Location. The books, accounts and records of the Corporation may be kept at such place or places within or outside the State of Delaware as the board of directors may from time to time determine.

8. Inspection. The books, accounts and records of the Corporation shall be open for inspection by any member of the board of directors at all times, and open to inspection by the stockholders at such times, and subject to such regulations as the board of directors may prescribe, except as otherwise provided by statute.

ARTICLE VII.

Seal and Fiscal Year

1. Seal. The Corporation shall have a seal in the form impressed to the left of this paragraph of the Bylaws.

2. Fiscal Year. The fiscal year of the Corporation shall be determined by the board of directors and set forth in the minutes of the directors. Said fiscal year may be changed from time to time by the board of directors in its discretion.

ARTICLE VIII.

Dividends

Dividends shall be declared and paid out of the surplus or net profits for the fiscal year in which the dividend is declared, and/or the preceding fiscal year as often and at such times as the board of directors may determine. If the capital of the Corporation, computed in accordance with the General Corporation Law of Delaware, shall have been diminished by depreciation in the value of its property, or by losses, or otherwise, to an amount less than the aggregate amount of the capital represented by the issued and outstanding stock; the board of directors shall not declare and pay out of net profits any dividends upon any shares of its capital stock until the deficiency in the amount of capital represented by issued and outstanding stock shall have been repaired. No unclaimed dividend shall bear interest against the Corporation.

ARTICLE IX.

Amendments

Subject to repeal or change by action of the stockholders in accordance with the Certificate of Incorporation, the board of directors may amend, supplement or repeal these Bylaws or adopt new Bylaws, and all such changes shall affect and be binding upon the holders of all shares heretofore as well as hereafter authorized, subscribed for or offered.

ARTICLE X.

Miscellaneous

1. Gender. Whenever required by the context, the singular shall include the plural, the plural the singular, and one gender shall include all genders.
2. Invalid Provision. The invalidity or unenforceability of any particular provision of these Bylaws shall not affect the other provisions herein, and these Bylaws shall be construed in all respects as if such invalid or unenforceable provision was omitted.
3. Governing Law. These Bylaws shall be governed by and construed in accordance with the laws of the State of Delaware.
4. Severability. If any provision (or any part thereof) or provisions of these Bylaws shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever: (i) the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of these Bylaws (including, without limitation, each portion of any section of these Bylaws containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and (ii) to the fullest extent possible, the provisions of these Bylaws (including, without limitation, each such portion containing any such provision held to be invalid, illegal or unenforceable) shall be construed for the benefit of the Corporation to the fullest extent permitted by law so as to (a) give effect to the intent manifested by the provision held invalid, illegal or unenforceable, and (b) permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service. Reference herein to laws, regulations or agencies shall be deemed to include all amendments thereof, substitutions therefor and successors thereto, as the case may be.

ARTICLE XI.

Exclusive Jurisdiction for Certain Actions

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Corporation, (b) any action asserting a claim of breach of fiduciary duty owed by, or other wrongdoing by, any director, officer, employee or agent of the Corporation to the Corporation or the Corporation's stockholders, creditors or other constituents, (c) any action asserting a claim arising pursuant to any provision of the General Corporation Law of Delaware or the Certificate of Incorporation or these Bylaws of the Corporation, (d) any action to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or these Bylaws of the Corporation or (e) any action asserting a claim governed by the internal affairs doctrine, in each case subject to said Court of Chancery of the State of Delaware having personal jurisdiction over the indispensable parties named as defendants therein; provided that if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware.

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

To the fullest extent permitted by applicable law, any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XI of these Bylaws.



VIA EMAIL

February 28, 2022

Joseph W. Vazzano, CPA

Dear Joseph:

This letter agreement sets forth the terms of your employment as Senior Vice President, Chief Financial Officer, effective March 7, 2022 (the "Effective Date").

1. Duties; Best Efforts.

As Senior Vice President, Chief Financial Officer, you shall have the duties, responsibilities, and authority commensurate therewith, and shall report to the Chief Executive Officer of the Company. You shall perform all duties and accept all responsibilities incident to such position as may be reasonably assigned to you. You represent that you are not subject to or a party to any employment agreement, noncompetition covenant, or other agreement that would be breached by, or prohibit you from executing, this letter agreement ("Agreement"), or which would prevent you from fully performing your duties and responsibilities hereunder.

During your employment, you will devote your best efforts and full time and attention to promoting the business and affairs of the Company and its affiliates, and you will engage in other business activities only if such activities do not materially interfere or conflict with your obligations to the Company hereunder, including, without limitation, your obligations pursuant to Section 4 below.

2. Compensation and Benefits.

(a) Base Salary. As of the Effective Date, you will receive an annual base salary of \$360,000 ("Base Salary"), as approved by the Compensation Committee of the Board of Directors of the Company and payable in accordance with the regular payroll practices of the Company. If the Company effectuates a successful reverse stock split and maintains its Nasdaq listing in 2022, your Base Salary will increase to \$400,000 as of the later of (i) the next administratively possible payroll date after completion of the reverse stock split, or (ii) the first payroll date of Q3 2022.

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(b) Annual Bonus. During your employment, you may be considered for an annual discretionary bonus (“Annual Bonus”) in addition to your Base Salary, with a target of 40% of your Base Salary (“Target Annual Bonus Opportunity”). Annual Bonus compensation in any year, if any, will be determined in the Company’s sole discretion, and shall be based on your performance and that of the Company, as well as market factors. Except as provided below under Section 3, to be eligible to receive an Annual Bonus as described above, you must be employed in good standing, and not have provided notice of resignation or been provided notice of termination, on the date that the Annual Bonus is paid.

(c) Equity Compensation. In connection with your employment, and subject to Compensation Committee discretion and approval, you may be entitled to receive (i) stock option grants to purchase shares of Company common stock and (ii) other long-term equity compensation grants (collectively, “Equity Awards”) under the Abeona Therapeutics Inc. 2015 Equity Incentive Plan (“Plan”), subject to the terms and conditions of the Plan and the agreement memorializing the terms of the Equity Awards.

(d) Sign-On Equity. As approved by the Compensation Committee, in connection with execution of this Agreement you will be granted 200,000 shares of restricted stock (“Restricted Shares”). If the Company effectuates a successful reverse stock split and maintains its Nasdaq listing in 2022, you will be granted an additional 30,000 Restricted Shares on or about the later of (i) the next administratively possible payroll date after completion of the reverse stock split, or (ii) the first payroll date of Q3 2022. In the future, you may be granted options under the Abeona Therapeutics 2015 Equity Incentive Plan to purchase shares of the Company’s Common Stock (“Option Shares”) at an exercise price per share equal to the Fair Market Value of a share of Common Stock (each term as defined in the Equity Incentive Plan) on the date of grant.

Option Shares and Restricted Shares will vest over a forty-eight (48) month period, with one quarter (25%) vesting on the one-year anniversary of the Effective Date and the remaining seventy-five percent (75%) of the Option Shares vesting in equal installments thereafter over the remaining thirty-six (36) months—Restricted Shares annually and Options monthly—commencing with the first such month following the first anniversary of the Effective Date.

Equity vesting is subject to your continued employment with the Company and/or its Affiliates through the applicable vesting dates, and subject to the terms and conditions of the Company’s Equity Incentive Plan, except as provided below.

(e) Change in Control Vesting. If you remain continuously employed from the Effective Date through the date of a Change in Control (as defined below), notwithstanding the terms of any equity incentive plan or award agreements, as applicable, all outstanding unvested stock options granted to you during your employment with the Company shall become fully vested and exercisable and will remain exercisable for three (3) months following the date of a Change in Control, and all outstanding long-term equity compensation awards, other than stock options, shall become fully vested and the restrictions thereon shall lapse. Pursuant to the terms of the Plan, the exercise price of the stock options will be the fair market value of the Company’s common stock on the date that the stock options were granted.

(f) Benefits. During your employment, you will be eligible to participate in such health and other group insurance and other employee benefit plans and programs of the Company as are in effect from time to time, on the same basis as those in commensurate positions of the Company. Your participation will be subject to the terms of the applicable plan documents and generally applicable Company policies. The Company reserves the right to amend or terminate any employee benefit plan, program and policy in its discretion at any time.

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(g) Paid Time Off. You will be entitled to twenty (20) days of paid time off (vacation days plus sick time/personal time) per year, accrued at a rate in accordance with the Company's policies from time to time in effect, in addition to holidays observed by the Company. Paid Time Off may be taken at such times and intervals as you shall determine, subject to the business needs of the Company and the responsibilities of your position.

3. Employment Termination.

(a) Termination of Employment; Accrued Amounts. The Company may terminate your employment for any reason, and you may voluntarily terminate your employment hereunder for any reason, in each case at any time upon written notice to the other party (the date on which your employment terminates for any reason is herein referred to as the "Termination Date"). Upon the termination of your employment for any reason, you (or your beneficiary or estate, as applicable, in the event of your death) will be entitled to (i) payment of any Base Salary earned but unpaid through the Termination Date, (ii) any accrued unused vacation days, (iii) additional vested benefits (if any) in accordance with the applicable terms of applicable Company arrangements, and (iv) any unreimbursed expenses in accordance with the Company's business expense reimbursement policies (collectively, the "Accrued Amounts"), provided, however, that if your employment hereunder is terminated (A) by the Company without Cause (as defined below) or (B) by you for Good Reason (as defined below), then you will be eligible to receive any Annual Bonus awarded for a prior year, but not yet paid or due to be paid as of the Termination Date.

(b) Severance. If your employment is terminated (i) by the Company other than for Cause or (ii) by you for Good Reason (as defined below), in addition to the Accrued Amounts and in lieu of any payments or benefits under any other Company separation policy or program, you will be entitled to: (A) a payment equal to the sum of twelve (12) months of your Base Salary plus twelve (12) months of your Target Annual Bonus Opportunity (the amount of such payment, the "Severance Amount"); and (B) a payment equal to the premiums that you would pay if you elected continued health coverage under the Company's health plan for you and your eligible dependents for the twelve (12) month period following the Termination Date, less the applicable active employee rate, which premiums will be calculated based on the rate determined under the COBRA rate in effect on the Termination Date ("Medical Benefit Payment"); provided that any delays in the settlement or payment of such awards that are set forth in the applicable award agreement and that are required under Section 409A of the Internal Revenue Code, as amended (the "Code"), and the Treasury Regulations thereunder ("Section 409A") shall remain in effect. The Company's obligations to make the payments and provide the benefits set forth in (A) and (B) in this Section 3(b) shall be conditioned upon your continued compliance with your obligations under Section 4 below and your execution and nonrevocation of a release of claims in favor of the Company and its affiliates in a form provided by the Company ("Release"). Notwithstanding any provision to the contrary herein (other than the provisions of Section 7 below), and without limitation of any remedies to which the Company may be entitled, (I) the Severance Amount shall be paid in installments in accordance with the Company's regular payroll practices during a twelve (12) month period commencing within sixty (60) days following the Termination Date (with the first such payment to include all installment amounts from the Termination Date), and (II) the Medical Benefit Payment shall be paid in a lump sum within sixty (60) days following the Termination Date; provided that the Release is effective.

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(c) Change in Control Termination. Notwithstanding any other provision contained herein, if your employment hereunder is terminated by you for Good Reason (as defined below) or by the Company without Cause, in each case within twelve (12) months following a Change in Control, in addition to the Accrued Amounts and in lieu of any payments or benefits under any other Company separation policy or program, you will be entitled to receive (A) a payment equal to the sum of twelve (12) months of your Base Salary plus twelve (12) months of your Target Annual Bonus Opportunity (such amount, the “CIC Severance Amount”); and (B) a payment equal to the premiums that you would pay if you elected continued health coverage under the Company’s health plan for you and your eligible dependents for the twelve (12) month period following the Termination Date, less the applicable active employee rate, which premiums will be calculated based on the rate determined under the COBRA rate in effect on the Termination Date (“CIC Medical Benefit Payment”). If the Change in Control is a “change in control event” as defined under Section 409A, (I) the CIC Severance Amount shall be paid in a lump sum within sixty (60) days following the Termination Date; and (II) the CIC Medical Benefit Payment shall be paid in a lump sum within sixty (60) days following the Termination Date. The Company’s obligations to provide the payments and benefits described in this Section 3(c) shall be conditioned upon your continued compliance with your obligations under Section 4 below and your execution and delivery to the Company of an effective Release.

(d) Resignation of Positions. Upon your termination of employment with the Company for any reason, you will be deemed to have resigned, as of the Termination Date, from all positions you then hold with the Company and its affiliates, and you agree to execute all documents necessary to effectuate the same.

(e) Cooperation. Following the termination of your employment with the Company for any reason, you will reasonably cooperate with the Company upon request of the CEO, General Counsel, or the Board, and be reasonably available to the Company (taking into account your other business endeavors) with respect to matters arising out of your services to the Company and its subsidiaries, including, in connection with any legal proceeding, providing testimony and affidavits; provided, that, the Company shall make reasonable efforts to minimize disruption of your other activities. The Company shall reimburse you for reasonable expenses incurred in connection with such cooperation.

(f) Definitions. For purposes of this Agreement, the following terms have the following meanings:

(i) “Cause” shall mean: (A) your substantial failure to perform your duties (other than any such failure resulting from incapacity due to physical or mental disability) that continues for fifteen (15) calendar days after written notice from the Company; (B) your failure to comply with any valid and legal directive of the CEO or the Board (as applicable) that continues for fifteen (15) calendar days after written notice from the Company; (C) your engagement in dishonesty, illegal conduct, or misconduct (or the discovery of your having engaged in such conduct in the past), which, in each case, materially harms or is reasonably likely to materially harm, reputationally, financially or otherwise, the Company or its subsidiaries; (D) your embezzlement, misappropriation, or fraud, whether or not related to your employment with the Company; (E) your conviction of or plea of guilty or nolo contendere to a crime that constitutes a felony; (F) your willful violation of a material policy of the Company; (G) your willful or grossly negligent unauthorized disclosure of Confidential Information (as defined below); or (H) your material breach of any material obligation under this Agreement or any other written agreement between you and the Company that continues for fifteen (15) calendar days after written notice from the Company (if such breach is reasonably curable); or (I) any willful material failure by you to comply with the Company’s written policies or written rules, as they may be in effect from time to time.

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(ii) "Change in Control" shall have the meaning defined in subparagraph (ii) of the definition of such term under the Appendix in the Plan as in effect on the date hereof.

(iii) "Good Reason" shall mean the occurrence of any of the following, in each case without your written consent: (A) a material reduction of at least ten percent (10%) of your Base Salary other than a general reduction in Base Salary that affects all similarly situated executives; (B) a material reduction of at least thirty percent (30%) of the Target Annual Bonus Opportunity other than a general reduction in the Target Annual Bonus Opportunity that affects all similarly situated executives; (C) a permanent and material relocation of your principal place of employment, which for purposes of this Agreement, means a relocation of more than fifty (50) miles; (D) any material breach by the Company of any material provision of this Agreement; or (E) a material adverse change in your title, authority, duties, or responsibilities (including the reporting structure applicable to you, other than temporarily while you are physically or mentally incapacitated); provided, however, that you cannot terminate your employment for Good Reason unless you have provided written notice to the Company of the existence of the circumstances providing grounds for termination for Good Reason within sixty (60) calendar days following the initial existence of such grounds and the Company has had thirty (30) calendar days from the date on which such notice is provided to cure such circumstances. If you do not terminate your employment for Good Reason within sixty (60) calendar days after expiration of the cure period (in which the Company shall not have so cured such grounds), then you will be deemed to have waived your right to terminate for Good Reason with respect to such grounds.

4. Restrictive Covenants.

This offer of employment is contingent upon your signing the Company's Policy on Insider Trading, Whistle Blower Policy, Code of Ethics, and the standard Employee Confidentiality, Non-competition and Proprietary Information Agreement attached hereto as Exhibit A, the terms of which are incorporated herein by reference in its entirety.

5. Conditions of Employment

This offer of employment is contingent upon your providing an I-9 Employment Verification Form. You will be required to submit documentation that establishes your identity and employment eligibility in accordance with the U.S. Immigration and Naturalization requirements, if appropriate. The offer of employment contained in this Agreement, and your continued employment, are contingent upon and subject to a satisfactory background and reference check (which you hereby authorize), including but not limited to confirmation of your stated credentials. It will be in the Company's sole discretion at any time to determine the scope of the background and reference check, whether and when to conduct or update such background check and reference check, and whether such check is satisfactory.

6. At-Will Employment

Your employment with the Company is at-will. This means that you will have the right to terminate your employment relationship with the Company at any time for any reason. Similarly, the Company will have the right to terminate its employment relationship with you at any time for any reason.

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7. Section 409A.

(a) To the extent applicable, it is intended that this Agreement (including all amendments hereto, if any) either meets the requirements for exclusion from coverage under Section 409A, or alternatively complies with the requirements of Section 409A, so that the income inclusion provisions of Section 409A(a)(1) of the Code do not apply to you. This Agreement shall be interpreted and administered in a manner consistent with this intent.

(b) To the extent that payment of amounts under this Agreement that are subject to Section 409A are payable upon termination of your employment, such amounts shall only be payable if such termination also constitutes a "separation from service," within the meaning of Section 409A, from the Company and its affiliates. If you are deemed on the date of your separation from service to be a "specified employee" (within the meaning of Section 409A(a)(2)(B) of the Code) of the Company, then, notwithstanding any other provision herein, with regard to any payment that is "nonqualified deferred compensation" subject to Section 409A and that is payable on account of your "separation from service," such payment shall not be made prior to twelve (12) months from the date of your separation from service, following which all payments so delayed shall be paid to you in a lump sum without interest.

(c) Any taxable reimbursement of business or other expenses provided for under this Agreement that is subject to Section 409A shall be subject to the following conditions: (i) the expenses eligible for reimbursement in one taxable year shall not affect the expenses eligible for reimbursement in any other taxable year; (ii) the reimbursement of an eligible expense shall be made no later than the end of the year after the year in which such expense was incurred; and (iii) the right to reimbursement shall not be subject to liquidation or exchange for another benefit.

(d) In applying Section 409A to amounts paid pursuant to this Agreement, each payment shall be treated as a separate payment and any right to a series of installment payments under this Agreement shall be treated as a right to a series of separate payments. Whenever a payment under this Agreement specifies a payment period within a specified number of days, the actual date of payment within the specified period shall be within the sole discretion of the Company. If the consideration and revocation period for the Release spans two taxable years and any amount hereunder is "nonqualified deferred compensation" subject to Section 409A and payable on account of your separation from service, such payment shall not be made or commence until the second taxable year.

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8. Section 280G.

In the event of a change in ownership or control under Section 280G of the Code, if it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for your benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (a “Payment”), would constitute an “excess parachute payment” within the meaning of Section 280G of the Code, the aggregate present value of the Payments under this Agreement shall be reduced (but not below zero) to the Reduced Amount (defined below) if and only if the Accounting Firm (described below) determines that the reduction will provide you with a greater net after-tax benefit than would no reduction. No reduction shall be made unless the reduction would provide you with a greater net after-tax benefit. The determinations under this Section 8 shall be made as follows:

(i) The “Reduced Amount” shall be an amount expressed in present value which maximizes the aggregate present value of Payments under this Agreement without causing any Payment under this Agreement to be subject to the Excise Tax (defined below), determined in accordance with Section 280G(d)(4) of the Code. The term “Excise Tax” means the excise tax imposed under Section 4999 of the Code, together with any interest or penalties imposed with respect to such excise tax.

(ii) Payments under this Agreement shall be reduced on a nondiscretionary basis in such a way as to minimize the reduction in the economic value deliverable to you. Where more than one payment has the same value for this purpose and they are payable at different times, they will be reduced on a pro-rata basis. Only amounts payable under the Agreement shall be reduced pursuant to this Section.

(iii) All determinations to be made under this Section shall be made by an independent certified public accounting firm selected by the Company and agreed to by you immediately prior to the change in ownership or control transaction (the “Accounting Firm”). The Accounting Firm shall provide its determinations and any supporting calculations both to the Company and you within ten (10) days of the transaction. Any such determination by the Accounting Firm shall be binding upon the Company and you. All of the fees and expenses of the Accounting Firm in performing the determinations referred to in this Section shall be borne solely by the Company.

9. Miscellaneous.

(a) All amounts paid to you under this Agreement during or following your employment shall be subject to withholding and other employment taxes imposed by applicable law, and the Company shall withhold from any payments under this Agreement all federal, state and local taxes that the Company is required to withhold pursuant to any law or governmental rule or regulation. You shall be solely responsible for the payment of all taxes imposed on you relating to the payment or provision of any amounts or benefits hereunder.

(b) This Agreement may be executed by PDF or facsimile signatures in any number of counterparts, each of which shall be deemed an original, but all such counterparts shall together constitute one and the same instrument.

(c) From and after the Effective Date, this Agreement (including Exhibit A hereto) constitutes the entire agreement between you and the Company, and supersedes all prior representations, agreements and understandings (including any prior course of dealings), both written and oral, between you and the Company with respect to the subject matter hereof. In the event of any inconsistency between this Agreement and any other plan, program, practice or agreement in which you are a participant or a party, this Agreement shall control unless such other plan, program, practice or agreement is more favorable to you (term by term) or specifically refers to this Agreement as not controlling.

(d) This Agreement and any of the provisions hereof may be amended, waived (either generally or in a particular instance and either retroactively or prospectively), modified or supplemented, in whole or in part, only by written agreement signed by you and the Company. This Agreement and your rights and obligations hereunder may not be assigned by you, and any purported assignment by you in violation hereof shall be null and void. The Company is authorized to assign this Agreement to a successor to substantially all of its assets or business. Nothing in this Agreement shall confer upon any person not a party hereto, or the legal representatives of such person, any rights or remedies of any nature or kind whatsoever under or by reason of this Agreement, except the personal representative of the deceased. This Agreement shall inure to the benefit of, and be binding on, the successors and assigns of each of the parties, including, without limitation, your heirs and the personal representatives of your estate and any successor to all or substantially all of the business and/or assets of the Company.

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(e) No remedy conferred upon a party by this Agreement is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to any other remedy given under this Agreement or now or hereafter existing at law or in equity. Except as explicitly provided herein, no delay or omission by a party in exercising any right, remedy or power under this Agreement or existing at law or in equity shall be construed as a waiver thereof, and any such right, remedy or power may be exercised by such party from time to time and as often as may be deemed expedient or necessary by such party in its sole discretion.

(f) This Agreement shall be construed and enforced in accordance with the laws of the State of New York, without giving effect to the conflicts of law principles thereof.

(g) Any reference to a Section of the Code shall be deemed to include any successor to such Section.

(h) This Agreement and the compensation payable hereunder shall be subject to any applicable clawback or recoupment policies, share trading policies, and other policies that may be implemented by the Board from time to time with respect to officers of the Company.

(i) Any notices required or permitted hereunder or necessary or convenient in connection herewith shall be in writing and shall be deemed to have been given (a) when hand delivered, (b) when emailed to the email address stated below, or (c) when actually received, if notice is mailed by registered or certified mail to the physical address stated below.

If to Joseph W. Vazzano:

Joseph W. Vazzano, CPA
[●]

If to Company:

Abeona Therapeutics Inc.
c/o Chief Executive Officer
1330 Avenue of the Americas, 33rd Floor
New York, NY 10019
Email: legalnotice@abeonatherapeutics.com

(j) Please acknowledge your acceptance of this offer by returning a signed copy of this Agreement. If there are any other agreements of any type that you are aware of that may impact or limit your ability to perform your job at the Company, please let us know as soon as possible. In accepting this offer, you represent and warrant to the Company that you are not subject to any legal or contractual restrictions that would in any way impair your ability to perform your duties and responsibilities to the Company, and that all information you provided to the Company is accurate and complete in all respects.

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Very truly yours,

/s/ Vishwas Seshadri

Vishwas Seshadri, Ph.D., M.B.A.
Chief Executive Officer
Abeona Therapeutics Inc.

I accept this offer of employment with Abeona Therapeutics Inc.

/s/ Joseph W. Vazzano

Joseph W. Vazzano

Date: February 28, 2022

Signature page to Joseph W. Vazzano Offer Letter Dated February 28, 2022

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Exhibit A

**EMPLOYEE CONFIDENTIALITY, NON-COMPETITION, AND
PROPRIETARY INFORMATION AGREEMENT**

THIS AGREEMENT between Abeona Therapeutics Inc., a Delaware corporation (the "Company"), and Joseph W. Vazzano (the "Employee"), is made effective as of February 28, 2022.

1. Employee will make full and prompt disclosure to the Company of all inventions, improvements, modifications, discoveries, methods, technologies, biological materials, and developments, and all other materials, items, techniques, and ideas related directly or indirectly to the business of the Company (collectively, "Intellectual Property"), whether patentable or not, made or conceived by Employee or under Employee's direction during Employee's employment with the Company, whether or not made or conceived during normal working hours, or on the premises of the Company.

2. Employee agrees that all Intellectual Property, as defined above, shall be the sole property of the Company and its assigns, and the Company and its assigns shall be the sole owner of all patents and other rights in connection therewith. Employee hereby assigns to the Company any rights Employee may have or acquire in all Intellectual Property and all related patents, copyrights, trademarks, trade names, and other industrial and intellectual property rights and applications therefore, in the United States and elsewhere. Employee further agrees that with regard to all future developments of Intellectual Property, Employee will assist the Company in every way that may be reasonably required by the Company (and at the Company's expense) to obtain and, from time to time, enforce patents on Intellectual Property in any and all countries that the Company may require, and to that end, Employee will execute all documents for use in applying for and obtaining such patents thereon and enforcing the same, as the Company may desire, together with any assignment thereof to the Company or persons designated by the Company, and Employee hereby appoints the Company as Employee's attorney to execute and deliver any such documents or assignments requested by the Company. Employee's obligation to assist the Company in obtaining and enforcing patents for Intellectual Property in any and all countries shall continue beyond the termination of Employee's employment with the Company, but the Company shall compensate Employee at a reasonable, standard hourly rate following such termination for time directly spent by Employee at the Company's request for such assistance.

3. Employee hereby represents that Employee has no continuing obligation to assign to any former employer or any other person, corporation, institution, or firm any Intellectual Property as described above. Employee represents that Employee's performance of all the terms of this Agreement and as an employee of the Company does not and will not breach any agreement to keep in confidence proprietary information acquired by Employee, in confidence or in trust, prior to Employee's employment by the Company. Employee has not entered into, and Employee agrees not to enter into, any agreement (either written or oral), which would put Employee in conflict with this Agreement.

4. Employee agrees to assign to the Company any and all copyrights and reproduction rights to any material prepared by Employee in connection with this Agreement and/or developed during the term of Employee's employment with the Company.

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5. Employee understands and agrees that a condition of Employee's employment and continued employment with the Company is that Employee has not brought and will not bring to the Company or use in the performance of Employee's duties at the Company any materials or documents rightfully belonging to a former employer which are not generally available to the public.

6. Employee recognizes that the services to be performed by Employee hereunder are special, unique, and extraordinary and that, by reason of Employee's employment with the Company, Employee may acquire Confidential Information (as hereinafter defined) concerning the operation of the Company, the use or disclosure of which would cause the Company substantial loss and damage which could not be readily calculated and for which no remedy at law would be adequate. Accordingly, except as provided in the last Paragraph in this Section 6, Employee agrees that Employee will not (directly or indirectly) at any time, whether during or after Employee's employment with the Company:

- (i) knowingly use for personal benefit, or for any other reason not authorized by the Company, any Confidential Information that Employee may acquire or has acquired by reason of Employee's employment with the Company; or
- (ii) disclose any such Confidential Information to any person or entity except (A) in the performance of Employee's obligations to the Company hereunder, (B) as required by a court of competent jurisdiction or as permitted below, or (C) with the prior written consent of the Chief Executive Officer of the Company.

As used herein, "Confidential Information" includes, for example and without limitation, information with respect to the facilities and methods of the Company, reagents, chemical compounds, cell lines or subcellular constituents, organisms, or other biological materials, trade secrets, and other Intellectual Property, systems, patents and patent applications, procedures, manuals, confidential reports, financial information, business plans, prospects, or opportunities, personnel information, or lists of customers and suppliers; provided, however, that Confidential Information shall not include any information that is known or becomes generally known or available publicly (a) other than as a result of disclosure by Employee which is not permitted as described in clause (ii) above, (b) as a result of wrongful conduct of a third party, or (c) because the Company discloses such Confidential Information to others without obtaining an agreement of confidentiality.

Nothing in this Agreement shall prohibit or restrict Employee from lawfully (a) initiating communications directly with, cooperating with, providing information to, causing information to be provided to, or otherwise assisting in an investigation by any governmental or regulatory agency, entity, or officials, including, without limitation, the United States Food and Drug Administration (FDA), the United States Securities and Exchange Commission (SEC), or the United States Equal Employment Opportunity Commission (EEOC) (collectively, "Governmental Authorities") regarding a possible violation of any law; (b) responding to any inquiry or legal process directed to Employee individually (and not directed to the Company) from any such Governmental Authorities; (c) testifying, participating or otherwise assisting in an action or proceeding by any such Governmental Authorities relating to a possible violation of law; or (d) making any other disclosures that are protected under the whistleblower provisions of any applicable law. Notwithstanding the foregoing, Employee agrees that in making any such disclosures or communications, Employee will take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company Confidential Information to any parties other than any Governmental Authority. Employee further understands that Employee is not permitted to disclose the Company's attorney-client privileged communications or attorney work product unless required by applicable law. Additionally, pursuant to the federal Defend Trade Secrets Act of 2016, Employee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made to Employee's attorney in relation to a lawsuit for retaliation against Employee for reporting a suspected violation of law; or (iii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. This Agreement does not require Employee to obtain prior authorization from the Company before engaging in any conduct described in this Paragraph, or to notify the Company that Employee has engaged in any such conduct, except as required by applicable law or regulation.

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7. During the term of Employee's employment with the Company and for one (1) year thereafter (the "Restricted Period"), the Employee shall not, without the Company's written consent, directly or indirectly, for Employee's own account or for the account of others, act as an officer, director, stockholder (other than as the holder of less than 1% of the outstanding stock of any publicly traded company), owner, partner, employee, promoter, investor, consultant, manager or otherwise participate in the promotion, financing, ownership, operation, or management of, or assist in or carry on through proprietorship, a corporation, partnership, or other form of business entity which is in competition with the Company, within the United States or any other country, in the fields of gene and cell therapy (a) that the Company is engaged in or has engaged in within one (1) year prior to the Employee's separation from the Company, or (b) in which the Company is actively seeking or planning to conduct Company Business as of the date of such termination (the "Company Business"), and (c) about which the Employee possesses or has had access to Confidential Information.

During the Restricted Period, the Employee shall not, whether for Employee's own account or for the account of any other person (excluding the Company): (i) solicit or contact in an effort to do business with any person who was or is a customer or prospective customer (i.e., any individual or entity with whom the Company was actively engaged in soliciting to do business) of the Company, or any affiliate of the Company, at the time of Employee's termination or at any time during the two (2) year period prior to Employee's termination, if such solicitation or contact is for the purpose of competition with the Company; or (ii) solicit or induce any of the Company's employees to leave their employment with the Company or accept employment with anyone else, or hire any such employees or persons who were employed by the Company during the preceding twelve (12) months.

Nothing herein shall prohibit or preclude the Employee from performing any other types of services that are not precluded by this Section 7 for any other person.

Employee has carefully read and considered the provisions of this Section 7 (including the Restricted Period, scope of activity to be restrained, and the restriction's geographical scope) and concluded them to be fair, appropriate and reasonably required for the protection of the legitimate business interests of the Company, its officers, directors, employees, creditors, and shareholders. Employee understands that the restrictions contained in this Section 7 may limit Employee's ability to engage in a business similar to the Company's business, but acknowledges that Employee will receive adequate and affluent remuneration and other benefits from the Company hereunder to justify such restrictions.

Employee shall give prompt notice to the Company of Employee's acceptance of employment or other fee-for-service relationship during the Restricted Period, which notice shall include the name of, the business of, and the position that Employee shall hold with such other employer. Employee also agrees to inform any prospective employer or business entity or person of the restrictions set forth in this Agreement prior to accepting employment or entering into any business relationship.

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8. In the event that Employee's employment is transferred by the Company to a subsidiary, affiliated company, or acquiring company (as the case may be), Employee's employment by such company will, for the purpose of this Agreement, be considered as continued employment with the Company, unless Employee executes an agreement, substantially similar in substance to this Agreement, and until the effective date of said agreement in any such company for which Employee becomes employed Employee agrees to be bound by and comply with Employee's obligations under this Agreement. It is likewise agreed that no changes in Employee's position or title will operate to terminate the provisions of this Agreement unless expressly agreed to in writing.

9. Employee confirms that all Confidential Information is the exclusive property of the Company. All business records, papers, documents and electronic materials kept or made by Employee relating to the business of the Company which comprise Confidential Information shall be and remain the property of the Company during the Employee's employment and at all times thereafter. Upon the termination, for any reason, of Employee's employment with the Company, or upon the request of the Company at any time, Employee shall deliver to the Company, and shall retain no copies of any written or electronic materials, records and documents made by Employee or coming into Employee's possession concerning the business or affairs of the Company and which comprise Confidential Information. To the extent that, upon termination, Employee has any Confidential Information or other proprietary material of the Company stored within any smart phone or personal computer, email account, thumb drive or other storage device or cloud storage, Employee agrees to fully cooperate with the Company to return such information and material and subsequently permanently delete and remove such information and material from such devices (subject to any litigation preservation directive in effect), including, as necessary, providing access by the Company to such devices to ensure compliance with this Paragraph. Employee further agrees, upon termination of Employee's employment for any reason, unless such employment is transferred to a subsidiary, affiliated or acquiring company of the Company, to return to the Company all equipment, tools, or other devices owned by the Company that are then in Employee's possession, however such items were obtained, and Employee agrees not to reproduce or otherwise retain any document or data relating thereto.

10. Subject to Section 6 with respect to disclosure to Governmental Authorities, Employee agrees and covenants that s/he will not at any time make, publish or communicate to any person or entity or in any public forum any defamatory or disparaging remarks, comments, or statements concerning the Company or its businesses, or any of its employees, officers, and existing and prospective customers, suppliers, investors and other associated third parties.

11. Employee's obligations under this Agreement shall survive the termination of Employee's employment with the Company, regardless of the manner of and reason for such termination or resignation, and shall be binding upon Employee's heirs, executors, and administrators.

12. Prior to entering the employ of the Company, Employee has lawfully terminated employment with all previous employers. Employee acknowledges that this Agreement does not constitute a contract of employment for a term and does not otherwise imply that the Company will continue his or her employment for any period of time, and the nature of Employee's employment with the Company is at-will.

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13. Employee agrees that there is no Intellectual Property relevant to the subject matter of Employee's employment with the Company, which has been made or conceived or first reduced to practice by Employee alone or jointly with others prior to Employee's employment with the Company, which Employee desires to exclude from Employee's obligations under this Agreement.

14. No delay or omission by the Company in exercising any right under this Agreement will operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion.

15. Employee agrees that in addition to any other rights and remedies available to the Company for any breach or threatened breach by Employee of Employee's obligations hereunder, the Company shall be entitled to enforcement of Employee's obligations hereunder by whatever means are at the Company's disposal, including court injunction, without having to post a bond or other security. In the event of any such breach or threatened breach by Employee, the Company shall be entitled to recover all damages permitted by law in addition to its reasonably incurred costs and attorney's fees in enforcing its rights hereunder, and the Restricted Period shall be extended by the period of any such breach.

16. The Company may assign this Agreement to any other corporation or entity which acquires (whether by purchase, merger, consolidation or otherwise) all or substantially all of the business and/or assets of the Company. Employee shall have no rights of assignment.

17. If any provision of this Agreement shall be declared invalid, illegal, or unenforceable, then such provision shall be enforceable to the extent that a court deems it reasonable to enforce such provision. If such provision shall be unreasonable to enforce to any extent, such provision shall be severed, and all remaining provisions shall continue in full force and effect.

18. Employee hereby acknowledges receipt of the Company's Confidentiality Policy.

19. This Agreement shall be effective as of the date set forth below next to Employee's signature.

20. This Agreement and the employment offer letter constitute the entire contract between the parties hereto with regard to the subject matter hereof. They supersede any other agreements, representations, or understandings (whether oral or written and whether express or implied) which relate to the subject matter hereof.

21. This Agreement shall be governed in all respects by the laws of the State of New York. Each of the Company and Employee (a) hereby irrevocably submits to the exclusive jurisdiction of the state courts of the State of New York or the United States District Court for the Southern District of New York for the purpose of any action between the Company and Employee arising in whole or in part under or in connection with this Agreement, (b) hereby waives, to the extent not prohibited by applicable law, and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that any such action brought in one of the above-named courts should be dismissed on grounds of *forum non conveniens*, should be transferred or removed to any court other than one of the above-named courts, or should be stayed by reason of the pendency of some other proceeding in any other court other than one of the above-named courts, or that this Agreement or the subject matter hereof may not be enforced in or by such court, and (c) hereby agrees not to commence any such action other than before one of the above-named courts. Notwithstanding the previous sentence, the Company or Employee may commence any action in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

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IN WITNESS WHEREOF, Employee has executed this Agreement as of the date set forth above:

EMPLOYEE

By: /s/ Joseph W. Vazzano

Joseph W. Vazzano

ACCEPTED AND AGREED TO BY THE COMPANY:

By: /s/ Vishwas Seshadri

Vishwas Seshadri, Ph.D., M.B.A.
Chief Executive Officer

Signature page to Exhibit A of Joseph W. Vazzano Offer Letter Dated February 28, 2022

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PRINCIPAL EXECUTIVE OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Vishwas Seshadri, certify that:

1. I have reviewed this report on Form 10-Q of Abeona Therapeutics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2022

By: /s/ Vishwas Seshadri

Vishwas Seshadri
President and Chief Executive Officer
(Principal Executive Officer)

PRINCIPAL FINANCIAL OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Joseph Vazzano, certify that:

1. I have reviewed this report on Form 10-Q of Abeona Therapeutics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2022

By: /s/ Joseph Vazzano

Joseph Vazzano
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Abeona Therapeutics Inc. (the "Company") on Form 10-Q for the three months ended March 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Vishwas Seshadri, President and Chief Executive Officer of the Company, and Joseph Vazzano, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: May 13, 2022

By: /s/ Vishwas Seshadri
Vishwas Seshadri
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 13, 2022

By: /s/ Joseph Vazzano
Joseph Vazzano
Chief Financial Officer
(Principal Financial Officer)
