

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

FORM 8-K

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

Date of report (Date of earliest event reported): January 8, 2024

ABEONA THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation)

001-15771

(Commission
File Number)

83-0221517

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

**6555 Carnegie Ave, 4th Floor
Cleveland, OH 44103**

(Address of principal executive offices) (Zip Code)

(646) 813-4701

(Registrant's telephone number, including area code)

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

Title of Each Class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.01 par value	ABEO	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

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

Item 1.01. Entry into a Material Definitive Agreement.

Loan and Security Agreement

On January 8, 2024 (the "Closing Date"), Abeona Therapeutics Inc., a Delaware corporation ("Abeona") and its subsidiaries MacroChem Corporation, a Delaware corporation ("MacroChem") and Abeona Therapeutics LLC, an Ohio corporation ("Abeona OH" and, together with Abeona and MacroChem, each individually, a "Company" and collectively, the "Companies") entered into a Loan and Security Agreement (the "Agreement") with Avenue Venture Opportunities Fund, L.P., a Delaware limited partnership, as administrative agent and collateral agent ("Avenue" and the "Agent") and Avenue Venture Opportunities Fund II, L.P., a Delaware limited partnership ("Avenue 2" and, together with Avenue, the "Lenders"). Also on January 8, 2024, the Companies entered into a Supplement to the Agreement (collectively with the Agreement, the "Loan Agreement") with the Agent and the Lenders. The Loan Agreement provides for senior secured term loans (the "Loans") in an aggregate principal amount up to \$50 million, with (i) a committed tranche of \$20 million advanced on the Closing Date ("Tranche 1"), (ii) a committed tranche of up to \$10 million which may be advanced upon the request of the Company between June 30, 2024 and September 30, 2024, subject to the Company obtaining FDA approval of pz-cel in recessive dystrophic epidermolysis bullosa, with the issuance of a Priority Review Voucher ("Tranche 2"), and (iii) a discretionary tranche of up to \$20 million which may be advanced between March 31, 2025 and March 31, 2026 (the "Discretionary Tranche") provided at the discretion of the Lenders.

The Loans are due and payable on July 1, 2027 (the "Maturity Date"). The proceeds of the Loans are to be used for general corporate purposes.

The Loan principal is repayable in equal monthly installments beginning on April 8, 2025, with the possibility of deferring principal payments an additional nine to fifteen months contingent upon (i) the Company obtaining FDA approval of pz-cel in recessive dystrophic epidermolysis bullosa, with the issuance of a Priority Review Voucher and (ii) the Company raising \$90 million of cumulative equity and/or non-dilutive capital subsequent to the Closing Date. The Loans bear interest at a rate per annum (subject to

increase during an event of default) equal to the greater of (i) the prime rate, as published by the Wall Street Journal from time to time, plus 5.00% and (ii) 13.50%.

The Company may, subject to certain parameters, voluntarily prepay the Loans, in whole, at any time. If prepayment occurs on or before the one-year anniversary of the Closing Date, the Company is required to pay a prepayment fee equal to 3.00% of the principal amount of the Loans prepaid; if prepayment occurs after the one-year anniversary of the Closing Date and on or before the two-year anniversary of the Closing Date, the Company is required to pay a fee equal to 2.00% of the principal amount of the Loans; if prepayment occurs after the two-year anniversary of the Closing Date, the Company is required to pay a fee equal to 1.00% of the principal amount of the Loans. A final payment fee of 5.00% of the principal amount of the funded Tranche 1, Tranche 2 Loans and Discretionary Tranche Loans is also due upon the Maturity Date or any earlier date of prepayment.

The Company's obligations under the Loan Agreement are secured by a pledge of substantially all of the Company's assets.

Pursuant to the Loan Agreement, the Company is subject to a financial covenant requiring the Company to maintain at all times \$5 million in unrestricted cash. The Loan Agreement also contains affirmative and negative covenants customary for financings of this type that, among other things, limit the ability of the Company and its subsidiaries to (i) incur additional debt, guarantees or liens; (ii) pay dividends; (iii) enter into certain change of control transactions; (iv) sell, transfer, lease, license, or otherwise dispose of certain assets; (v) make certain investments or loans; and (vi) engage in certain transactions with related persons, in each case, subject to certain exceptions.

The Loan Agreement also includes events of default customary for financings of this type, in certain cases subject to customary periods to cure, following which the Agent may accelerate all amounts outstanding under the Loans.

Pursuant to the Supplement, Avenue also has the right to convert up to \$3 million of the outstanding principal of the Loans into shares of Company common stock (the "Conversion Right") at a price per share equal to 120% of the exercise price of the Warrants (further discussed below) at any time while the Loans are outstanding, subject to certain terms and conditions, including ownership limitations.

- 2 -

In addition, subject to applicable law and specified provisions set forth in the Supplement and solely to the extent permitted under applicable stock exchange rules without requiring stockholder approval, the Lenders may participate in certain equity financing transactions of the Company in an aggregate amount of up to \$1 million on the same terms, conditions and pricing offered by the Company to other investors participating in such financing transactions (such right, the "Participation Right"). The Participation Right automatically terminates upon the earliest of (i) July 1, 2027, (ii) such time that the Lenders have purchased \$1 million of the Company's equity securities in the aggregate pursuant to the Participation Right, and (iii) the repayment in full of all of the obligations under the Loan Agreement.

The foregoing description of the Loan Agreement does not purport to be complete and is qualified in its entirety by reference to the text of the Agreement and the Supplement, which are filed as Exhibit 10.1 and Exhibit 10.2, respectively, to this Current Report on Form 8-K and are incorporated herein by reference.

Warrants

On the Closing Date and pursuant to the funding of Tranche 1 of the Loan Agreement, the Company issued to each of Avenue and Avenue 2 (collectively, the "Warrantholders") warrants to purchase up to \$480,000 and \$1,920,000 worth of shares, respectively, of Company common stock (each, a "Warrant" and collectively, the "Warrants"). The Warrants expire on January 8, 2029 (the "Expiration Date") and have an exercise price per share equal to the lesser of (i) \$4.75 and (ii) the price per share of the Company's next bona fide round of equity financing before September 30, 2024 in which the Company sells or issues shares of its common stock, excluding certain excluded issuances as defined in the Supplement. In addition, upon a change of control where the per share price of the Company common stock is less than or equal to two times that of the exercise price, the Warrantholders would be entitled to receive the shares of common stock underlying the Warrant without payment of the exercise price.

The Warrantholders may exercise the Warrants at any time, or from time to time up to and including the Expiration Date, by making a cash payment equal to the exercise price multiplied by the quantity of shares. The Warrantholders may also exercise the Warrants on a cashless basis by receiving a net number of shares calculated pursuant to the formula set forth in the Warrants. The Warrants are subject to anti-dilution adjustments for stock dividends, stock splits, and reverse stock splits.

The foregoing description of the Warrants does not purport to be complete and is qualified in its entirety by reference to the text of the Warrants, which are filed as Exhibit 4.1 and Exhibit 4.2 to this Current Report on Form 8-K and are incorporated herein by reference.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information included in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 2.03 of this Current Report on Form 8-K.

Item 8.01. Other Events.

On the Closing Date, the Company issued a press release announcing the closing of the transactions contemplated by the Loan Agreement. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
4.1	Warrant to Purchase Common Stock, by and between Abeona Therapeutics, Inc. and Avenue Venture Opportunities Fund, L.P., dated as of January 8, 2024.
4.2	Warrant to Purchase Common Stock, by and between Abeona Therapeutics, Inc. and Avenue Venture Opportunities Fund II, L.P., dated as of January 8, 2024.
10.1*	Loan and Security Agreement, by and among Abeona Therapeutics, Inc., MacroChem Corporation, Abeona Therapeutics LLC, Avenue Venture Opportunities Fund, L.P., as Agent, and Avenue Venture Opportunities Fund II, L.P., dated as of January 8, 2024.
10.2	Supplement to the Loan and Security Agreement, by and among Abeona Therapeutics, Inc., MacroChem Corporation, Abeona Therapeutics LLC, Avenue Venture Opportunities Fund, L.P., as Agent, and Avenue Venture Opportunities Fund II, L.P., dated as of January 8, 2024.
99.1	Press Release from Abeona Therapeutics, Inc., dated as of January 8, 2024.
104	Cover Page Interactive Data File (embedded within the inline XBRL document).

* Certain schedules and exhibits to this agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

- 3 -

SIGNATURE

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 hereunto duly authorized.

Abeona Therapeutics Inc.
(Registrant)

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Chief Financial Officer

Date: January 8, 2024

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE AND DISTRIBUTION THEREOF, AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF (A) SUCH REGISTRATION, (B) AN OPINION OF COUNSEL IN A FORM REASONABLY ACCEPTABLE TO COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED DUE TO AN EXEMPTION THEREFROM UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR (C) ABEONA THERAPEUTICS INC. OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS COMPLIANT WITH SUCH LAWS.

Date of Issuance: January 8, 2024

WARRANT TO PURCHASE
SHARES OF COMMON STOCK OF
ABEONA THERAPEUTICS INC.
(Void after January 8, 2029)

This certifies that AVENUE VENTURE OPPORTUNITIES FUND, L.P., a Delaware limited partnership, or permitted assigns (“Holder”), for value received, is entitled to purchase from ABEONA THERAPEUTICS INC., a Delaware corporation (“Company”), the Applicable Number (hereinafter defined) of fully paid and nonassessable shares of the Company’s Common Stock (the “Common Stock”), for cash, at a purchase price per share equal to the Exercise Price (hereinafter defined). Holder may also exercise this Warrant on a cashless or “net issuance” basis as described in Section 1(b) below, and this Warrant shall be deemed to have been exercised in full on such basis on the Expiration Date (hereinafter defined), to the extent not fully exercised prior to such date. This Warrant is issued in connection with that certain Loan and Security Agreement and Supplement thereto, both of even date herewith (as amended, restated and supplemented from time to time, the “Loan Agreement” and the “Supplement”, respectively), between Company, as borrower, and Holder, as lender (“Lender”). Capitalized terms used herein and not otherwise defined in this Warrant shall have the meaning(s) ascribed to them in the Loan Agreement and the Supplement, unless the context would otherwise require.

In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated below:

“Applicable Number” means the number of shares of Common Stock purchasable hereunder obtained by dividing (x) \$480,000.00 by (y) the Exercise Price.

“Bona Fide Equity Financing” means the sale and issuance by Company of its equity securities (whether common shares, preferred shares and/or warrants) and/or convertible debt in each case for bona fide financing purposes with gross proceeds to Company in excess of \$10,000,000 over any 60-day period. The effective price per share of any Bona Fide Equity Financing shall be equal to (a) the gross proceeds of such Bona Fide Equity Financing received by the Company (plus, in the case of any securities convertible or exercisable for Common Stock (including warrants) the total cash exercise or conversion price payable upon conversion or exercise) *divided by* (b) the aggregate number of shares of Common Stock issued in such Bona Fide Equity Financing (plus all shares of Common Stock issuable upon exercise or conversion of such convertible or exercisable securities (including warrants)).

“Exercise Price” means the lower of \$4.75, and (b) the effective price per share of any Bona Fide Equity Financing that occurs prior to September 30, 2024.

“Warrant Shares” means the shares of Common Stock purchased or purchasable hereunder.

Subject to Sections 4.3 and 4.8, this Warrant may be exercised at any time or from time to time up to and including 5:00 p.m. (Pacific time) on January 8, 2029 (the “Expiration Date”), upon surrender to Company at its principal office at 6555 Carnegie Avenue, 4th Floor, Cleveland, OH 44103 (or at such other location as Company may advise Holder in writing) of this Warrant properly endorsed with the Form of Subscription attached hereto duly completed and signed and upon payment in cash or by check of the aggregate Exercise Price for the number of shares for which this Warrant is being exercised determined in accordance with the provisions hereof. The Exercise Price and the number of shares purchasable hereunder are subject to further adjustment as provided in Section 4 of this Warrant.

This Warrant is subject to the following terms and conditions:

1. Exercise; Issuance of Certificates; Payment for Shares

(a) Unless an election is made pursuant to clause (b) of this Section 1, this Warrant shall be exercisable at the option of Holder, at any time or from time to time, on or before the Expiration Date for all or any portion of the Warrant Shares (but not for a fraction of a share) which may be purchased hereunder for the Exercise Price multiplied by the number of Warrant Shares to be purchased. Company agrees that the Warrant Shares purchased under this Warrant shall be and are deemed to be issued to Holder as the record owner of such Warrant Shares as of the close of business on the date on which the form of subscription shall have been delivered and payment made for such Warrant Shares. Subject to the provisions of Section 2, certificates for the Warrant Shares so purchased, together with any other securities or property to which Holder is entitled upon such exercise, shall be delivered to Holder by Company at Company’s expense within a reasonable time after the rights represented by this Warrant have been so exercised. Except as provided in clause (b) of this Section 1, in case of a purchase of less than all the Warrant Shares, Company shall cancel this Warrant and execute and deliver a new Warrant or Warrants of like tenor for the balance of the Warrant Shares surrendered upon such purchase to Holder within a reasonable time. Each stock certificate or book-entry statement so delivered shall be in such denominations of Common Stock as may be requested by Holder and shall be registered in the name of such Holder or such other name as shall be designated by such Holder, subject to the limitations contained in Section 2.

(b) Holder, in lieu of exercising this Warrant by the cash payment of the Exercise Price pursuant to clause (a) of this Section 1, may elect, at any time on or before the Expiration Date, to surrender this Warrant and receive that number of shares of Common Stock computed using the following formula:

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

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock that Holder would otherwise have been entitled to purchase hereunder pursuant to Section 1(a) (or such lesser number of shares as Holder may designate in the case of a partial exercise of this Warrant).

A = the closing price on the last trading day prior to exercise of this Warrant.

B = the Exercise Price then in effect.

Election to exercise under this Section 1(b) may be made by delivering a signed form of subscription to Company via electronic mail or facsimile, to be followed by delivery of this Warrant. Notwithstanding anything to the contrary contained in this Warrant, if as of the close of business on the last business day preceding the Expiration Date this Warrant remains unexercised as to all or a portion of the Warrant Shares purchasable hereunder, then effective at 9:00 a.m. (Pacific time) on the Expiration Date, Holder shall be deemed, automatically and without need for notice to Company, to have elected to exercise this Warrant in full pursuant to the provisions of this Section 1(b), and upon surrender of this Warrant shall be entitled to receive that number of Warrant Shares computed using the above formula, provided that the application of such formula as of the Expiration Date yields a positive number for "X".

2. Limitation on Transfer.

(a) This Warrant and the Warrant Shares shall not be transferable except upon the conditions specified in this Section 2, which conditions are intended to ensure compliance with the provisions of the Securities Act of 1933, as amended (the "Securities Act"). Each holder of this Warrant or the Warrant Shares issuable hereunder will cause any proposed transferee of the Warrant or the Warrant Shares to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Section 2. Notwithstanding the foregoing and any other provision of this Section 2 but subject to the last sentence of Section 2(c), Holder may freely transfer all or part of this Warrant or the shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the shares, if any) at any time to any affiliate of Lender under the Loan Agreement, by giving Company notice of the portion of the Warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to Company for reissuance to the transferee(s) (and Holder, if applicable).

(b) Each certificate representing (i) this Warrant, (ii) the Warrant Shares, and (iii) any other securities issued in respect of the Warrant Shares issued upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall (unless otherwise permitted by the provisions of this Section 2 or unless such securities have been registered under the Securities Act or sold under Rule 144) be stamped or otherwise imprinted with a legend substantially in the following form (in addition to any legend required under applicable state securities laws):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE AND DISTRIBUTION THEREOF, AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF (A) SUCH REGISTRATION, (B) AN OPINION OF COUNSEL IN A FORM REASONABLY ACCEPTABLE TO COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED DUE TO AN EXEMPTION THEREFROM UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR (C) ABEONA THERAPEUTICS INC. OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS COMPLIANT WITH SUCH LAWS.

(c) Holder of this Warrant and each person to whom this Warrant is subsequently transferred represents and warrants to Company and agrees (by acceptance of such transfer) that it will not transfer this Warrant (or securities issuable upon exercise hereof unless a registration statement under the Securities Act was in effect with respect to such securities at the time of issuance thereof) unless (i) there is an effective registration statement under the Securities Act and applicable state securities laws covering any such transaction, (ii) pursuant to Rule 144 under the Securities Act (or any other rule under the Securities Act relating to the disposition of securities), (iii) Company receives an opinion of counsel, reasonably satisfactory to Company, that an exemption from such registration is available or (iv) the Company otherwise satisfies itself that such transaction is exempt from registration. Notwithstanding the foregoing or any other provision of this Section 2, Holder shall not transfer this Warrant (or securities issuable upon exercise hereof, or securities issuable, directly or indirectly, upon conversion of such securities, if any) to any competitor of Company, as determined in good faith by the Board of Directors of Company (the "Board"), without the prior written consent of Company.

3. Shares to be Fully Paid; Reservation of Shares. Company covenants and agrees that all Warrant Shares will, upon issuance, be duly authorized, validly issued, fully paid and nonassessable and free from all preemptive rights of any stockholder and free of all taxes, liens and charges with respect to the issue thereof. Company further covenants and agrees that during the period within which the rights represented by this Warrant may be exercised, Company will at all times have authorized and reserved, for the purpose of issue or transfer upon exercise of the subscription rights evidenced by this Warrant, a sufficient number of shares of authorized but unissued Common Stock, or other securities and property, when and as required to provide for the exercise of the rights represented by this Warrant. Company will take all such action as may be necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any domestic securities exchange upon which the Common Stock may be listed. Company will not take any action which would result in any adjustment of the Exercise Price (as described in Section 4 hereof) (i) if the total number of Warrant Shares issuable after such action upon exercise of all outstanding warrants, together with all shares of Common Stock then outstanding and all shares of Common Stock then issuable upon exercise of all options and upon the conversion of all convertible securities then outstanding, would exceed the total number of shares of Common Stock then authorized by Company's Certificate of Incorporation, as amended and restated from time to time (the "Charter") or (ii) if the par value per share of the Common Stock would exceed the Exercise Price.

4. Adjustment of Exercise Price and Number of Shares. The Exercise Price and the number of shares purchasable upon the exercise of this Warrant shall be subject to adjustment from time to time upon the occurrence of certain events described in this Section 4. Upon each adjustment of the Exercise Price, Holder of this Warrant shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of Warrant Shares obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of Warrant Shares purchasable pursuant hereto immediately prior to such adjustment, and dividing the product thereof by the Exercise Price resulting from such adjustment.

4.1 Subdivision or Combination of Stock. In case Company shall at any time subdivide its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced, and conversely, in case the outstanding shares of Common Stock of Company shall be combined into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased.

4.2 Dividends. If at any time or from time to time the holders of Common Stock (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received or become entitled to receive,

(a) Common Stock, or any shares of stock or other securities whether or not such securities are at any time directly or indirectly convertible into or exchangeable for Common Stock, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution,

(b) any cash paid or payable including as a cash dividend, or

(c) Common Stock or other or additional stock or other securities or property (including cash) by way of spin off, split-up, reclassification, combination of shares or similar corporate rearrangement, (other than shares of Common Stock issued as a stock split, adjustments in respect of which shall be covered by the terms of Section 4.1 above),

then and in each such case, Holder hereof shall, upon the exercise of this Warrant, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of stock and other securities and property (including cash in the cases referred to in clauses (b) and (c) above) which such Holder would hold on the date of such exercise had it been the holder of record of such Common Stock as of the date on which holders of Common Stock received or became entitled to receive such shares and/or all other additional stock and other securities and property.

4.3 Change of Control. In the event of a Change of Control (as hereinafter defined) where the per share price of the Company's Common Stock is less than or equal to two (2) times the Exercise Price, immediately prior to the consummation of such Change of Control, this Warrant shall be automatically exchanged for a number of shares of Company's securities, such number of shares being equal to the maximum number of shares issuable pursuant to the terms hereof (after taking into account all adjustments described herein) had Holder elected to exercise this Warrant immediately prior to the closing of such Change of Control and purchased all such shares pursuant to the cash exercise provision set forth in Section 1(a) hereof (as opposed to the cashless exercise provision set forth in Section 1(b)). Company acknowledges and agrees that Holder shall not be required to make any payment (cash or otherwise) for such shares as further consideration for their issuance pursuant to the terms of the preceding sentence. "Change of Control" shall mean any sale, license, or other disposition of all or substantially all of the assets of Company, any reorganization, consolidation, merger or other transaction involving Company where the holders of Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction; provided that an issuance of equity securities for the primary purpose of raising capital shall not be considered a Change of Control under this Warrant. This Warrant shall terminate upon Holder's receipt of the number of shares of Company's equity securities described in this Section 4.3.

4.4 Reserved.

4.5 Notice of Adjustment. Upon any adjustment of the Exercise Price, and/or any increase or decrease in the number of Warrant Shares purchasable upon the exercise of this Warrant, Company shall give written notice thereof to Holder pursuant to Section 12. The notice, which may be substantially in the form of Exhibit "A" attached hereto, shall be signed by Company's chief financial officer and shall state the Exercise Price resulting from such adjustment and the increase or decrease, if any, in the number of Warrant Shares purchasable at such price upon the exercise of this Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based.

4.6 Other Notices. If at any time:

- (a) Company shall declare any cash dividend upon its Common Stock;
- (b) Company shall declare any dividend upon its Common Stock payable in stock or make any special dividend or other distribution to the holders of its Common Stock;
- (c) Company shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;
- (d) there shall be any capital reorganization or reclassification of the capital stock of Company, or consolidation or merger of Company with, or sale of all or substantially all of its assets to, another entity;
- (e) there shall be a voluntary or involuntary dissolution, liquidation or winding-up of Company; or
- (f) Company shall take or propose to take any other action, notice of which is actually provided to holders of the Common Stock;

then, in any one or more of said cases, Company shall give Holder, pursuant to Section 12, (i) at least 15 days' prior written notice of the date on which the books of Company shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action and (ii) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action, at least 15 days' written notice of the date when the same shall take place. Any notice given in accordance with the foregoing clause (i) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto. Any notice given in accordance with the foregoing clause (ii) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action as the case may be.

4.7 Certain Events. If any change in the outstanding Common Stock of Company or any other event occurs as to which the other provisions of this Section 4 are not strictly applicable or if strictly applicable would not fairly effect the adjustments to this Warrant in accordance with the essential intent and principles of such provisions, then the Board shall make in good faith an adjustment in the number and class of shares issuable under this Warrant, the Exercise Price and/or the application of such provisions, in accordance with such essential intent and principles, so as to protect such purchase rights as aforesaid. The adjustment shall be such as will give Holder of this Warrant upon exercise for the same aggregate Exercise Price the total number, class and kind of shares as Holder would have owned had this Warrant been exercised prior to the event and had Holder continued to hold such shares until after the event requiring adjustment.

4.8 Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 1 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable notice of exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the 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 the Holder and its Affiliates and Attribution Parties shall include the number of Warrant Shares issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, the Conversion Option set forth in the Supplement) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 4.8, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 4.8 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a notice of exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company 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 4.8, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the transfer agent setting forth the number of shares of Common Stock outstanding. Upon the written request of a Holder, the Company shall within one trading day confirm in writing to the 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 Company, including this Warrant, by the 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 written election by Holder which is delivered to the Company prior to the issuance of any Warrant Shares to such Holder, 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 exercise of this

Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 4.8, provided that the Beneficial Ownership Limitation in no event exceeds 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 exercise of this Warrant held by the Holder and the provisions of this Section 4.8 shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 4.8 to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

6

5. Issue Tax. The issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to Holder of this Warrant for any issue tax in respect thereof; provided, however, that Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the then Holder of this Warrant being exercised.

6. Closing of Books. Company will at no time close its transfer books against the transfer of this Warrant or of any Warrant Shares issued or issuable upon the exercise of this Warrant in any manner which interferes with the timely exercise of this Warrant.

7. No Voting Rights; Limitation of Liability. Nothing contained in this Warrant shall be construed as conferring upon Holder hereof the right to vote or to consent as a stockholder in respect of meetings of stockholders for the election of directors of Company or any other matters or any rights whatsoever as a stockholder of Company. No dividends or interest shall be payable in respect of this Warrant or the interest represented hereby or the shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised; provided, however, that if any dividends are due or paid at any time on the underlying securities for which this Warrant is exercisable, then upon exercise, the securities issued to Holder shall be deemed to have accrued dividends and be paid identical dividends from the date of this Warrant. No provisions hereof, in the absence of affirmative action by Holder to purchase shares of Common Stock, and no mere enumeration herein of the rights or privileges of Holder hereof, shall give rise to any liability of such Holder for the Exercise Price or as a stockholder of Company, whether such liability is asserted by Company or by its creditors.

8. Amendment of Charter. Unless Holder consents thereto in writing, Company shall not amend its Charter prior to the exercise of this Warrant if the Common Stock would be adversely affected by such amendment in a manner that would be more adverse to Holder with respect to the shares of Common Stock issuable upon the exercise of this Warrant than, and substantially dissimilar to, such amendment's effect on the other holders of Common Stock.

9. Registration Rights. If Company proposes to file a new registration statement under the Securities Act for purposes of effecting an underwritten offering of its equity securities for its own account or for the account of any other persons (other than (i) a registration of securities solely relating to an offering and sale to employees or directors of the Company pursuant to any employee stock plan or other employee benefit plan arrangement, and (ii) a registration of securities filed on Form S-4 or Form S-8 or any successor thereto), Holder shall be entitled to piggyback registration rights, and Company shall afford Holder an opportunity to include in that registration all or any part of the Warrant Shares issued upon exercise hereof, provided, however, that the Company's underwriters may limit the number of shares included in such underwritten offering if the underwriters determine that marketing factors require a limitation of the number of shares to be underwritten which may impact the number of Holder's Warrant Shares eligible to be registered in such offering.

7

10. Rights and Obligations Survive Exercise of Warrant. The rights and obligations of Company, of Holder of this Warrant and of the holder of Warrant Shares contained in Sections 6, 8, 9 and 18 shall survive the exercise of this Warrant.

11. Modification and Waiver. This Warrant and any provision hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of the same is sought.

12. Notices. Any notice, request or other document required or permitted to be given or delivered to Holder or Company shall be deemed to have been given (i) upon receipt if delivered personally or by courier (ii) upon confirmation of receipt if by electronic mail of facsimile or (iii) three business days after deposit in the US mail, with postage prepaid and certified or registered, to each such Holder at its address as shown on the books of Company or to Company at the address indicated therefor in the opening paragraphs of this Warrant (or at such other location as Company may advise Holder in writing).

13. Survival of Certain Obligations. All of the obligations of Company relating to the Warrant Shares issuable upon the exercise of this Warrant shall survive the exercise and termination of this Warrant. All of the covenants and agreements of Company shall inure to the benefit of and be binding upon the successors and permitted assigns of Holder. Company will, at the time of the exercise of this Warrant, in whole or in part, upon request of Holder but at Company's expense, acknowledge in writing its continuing obligation to Holder in respect of any rights (including, without limitation, any right to registration of the Warrant Shares) to which Holder shall continue to be entitled after such exercise in accordance with this Warrant; provided, that the failure of Holder to make any such request shall not affect the continuing obligation of Company to Holder in respect of such rights.

14. Descriptive Headings and Governing Law. The descriptive headings of the several sections and paragraphs of this Warrant are inserted for convenience only and do not constitute a part of this Warrant. This Warrant shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of Delaware.

15. Lost or Rejected Warrants or Stock Certificates. Company agrees that upon receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction, or mutilation of any Warrant or stock certificate and, in the case of any such loss, theft or destruction, upon receipt of an indemnity reasonably satisfactory to Company, or in the case of any such mutilation upon surrender and cancellation of such Warrant or stock certificate, Company at its expense will make and deliver a new Warrant or stock certificate, of like tenor, in lieu of the lost, stolen, destroyed or mutilated Warrant or stock certificate. If at any time the electronic original of this Warrant is rejected by any person (including, but not limited to, paying or escrow agents) or any person fails to comply with the terms of this Warrant based on being presented to such person as an electronic record or a printout hereof, or any signature hereto being in electronic form, Company shall, promptly upon Holder's request and without indemnity, execute and deliver to Holder, in lieu of electronic original versions of this Warrant, a new warrant of like tenor and amount in paper form with original ink signatures.

16. Fractional Shares. No fractional shares shall be issued upon exercise of this Warrant. Company shall, in lieu of issuing any fractional share, pay the holder entitled to such fraction a sum in cash equal to such fraction multiplied by the then effective Exercise Price.

8

17. Representations of Holder. With respect to this Warrant, Holder represents and warrants to Company as follows:

17.1 Experience. It is experienced in evaluating and investing in companies engaged in businesses similar to that of Company; it understands that investment in this Warrant involves substantial risks; it has made detailed inquiries concerning Company, its business and services, its officers and its personnel; the officers of Company have made available to Holder any and all written information it has requested; the officers of Company have answered to Holder's satisfaction all inquiries made by it; in making this investment it has relied upon information made available to it by Company; and it has such knowledge and experience in financial and business matters that it is

capable of evaluating the merits and risks of investment in Company and it is able to bear the economic risk of that investment.

17.2 Investment. It is acquiring this Warrant and any Warrant Shares for investment for its own account and not with a view to, or for resale in connection with, any distribution thereof. It understands that this Warrant and the Warrant Shares issuable upon exercise of this Warrant, have not been registered under the Securities Act, nor qualified under applicable state securities laws.

17.3 Rule 144. It acknowledges that this Warrant and the Common Stock issuable upon exercise of this Warrant must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. It has been advised or is aware of the provisions of Rule 144 promulgated under the Securities Act.

17.4 Access to Data. It has had an opportunity to discuss Company's business, management and financial affairs with Company's management and has had the opportunity to inspect Company's facilities.

17.5 Accredited Investor. It is, and at the time this Warrant was offered was, an "accredited investor" within the meaning of Regulation D promulgated under the Securities Act.

18. Additional Representations and Covenants of Company. Company hereby represents, warrants and agrees as follows:

18.1 Corporate Power. Company has all requisite corporate power and corporate authority to issue this Warrant and to carry out and perform its obligations hereunder.

18.2 Authorization. All corporate action on the part of Company, its directors and stockholders necessary for the authorization, execution, delivery and performance by Company of this Warrant has been taken. This Warrant is a valid and binding obligation of Company, enforceable in accordance with its terms.

18.3 Offering. Subject in part to the truth and accuracy of Holder's representations set forth in Section 17 hereof, the offer, issuance and sale of this Warrant is, and the Common Stock issuable upon exercise of this Warrant will be, exempt from the registration requirements of the Securities Act, and are exempt from the qualification requirements of any applicable state securities laws; and neither Company nor anyone acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

18.4 Listing; Stock Issuance. Company shall use its commercially reasonable efforts to secure and maintain the listing of the Common Stock or other securities issuable upon exercise of this Warrant, upon each securities exchange or over-the-counter market upon which securities of the same class or series issued by Company are listed, if any. Upon exercise of this Warrant, Company will use commercially reasonable efforts to cause the issuance of the shares of Common Stock purchased pursuant to the exercise to be issued in book-entry form in the names of Holder, its nominees or assignees, as appropriate at the time of such exercise.

18.5 Charter Documents. Company has provided Holder with true and complete copies of Company's Charter, By-Laws, and each Certificate of Designation or other charter document setting, forth any rights, preferences and privileges of Company's capital stock, each as amended and in effect on the date of issuance of this Warrant.

9

18.6 Reserved.

18.7 Financial and Other Reports. Until the earlier of (a) the Expiration Date, and (b) the termination of this Warrant pursuant to Section 4.3, Company agrees to provide Holder at any time and from time to time with such information that is in the Company's possession as Holder may reasonably request for purposes of Holder's compliance (as determined by Holder in its reasonable discretion) with regulatory, accounting and reporting requirements applicable to Holder under law or GAAP (e.g., Fair Value Accounting Standard 157), including any 409A valuation reports (or equivalent reports) and budgets. Notwithstanding the foregoing, Company shall not be required to furnish to Holder the financial information described in this Section 18.7 in the event such financial information has been previously delivered to Lender pursuant to the Loan Agreement or produce any information not already in the Company's possession.

19. Counterparts; Facsimile; Electronic Signatures. This Warrant may be executed by one or more of the parties hereto in any number of separate counterparts, all of which together shall constitute one and the same instrument. Holder's execution and delivery of Holder's counterpart signature page to this Warrant via facsimile or electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docusign.com) shall constitute Holder's effective execution and delivery of this Warrant and agreement to and acceptance of the terms hereof for all purposes. The fact that this Warrant is executed, signed, stored or delivered electronically shall not prevent the transfer by any Holder of this Warrant pursuant to Section 2 or the enforcement of the terms hereof. Physical possession of the original of this Warrant or any paper copy thereof shall confer no special status to the bearer thereof. In no event shall an original ink-signed paper copy of this Warrant be required for any exercise of Holder's rights hereunder, nor shall this Warrant or any physical copy hereof be required to be physically surrendered at the time of any exercise hereof.

[Remainder of this page intentionally left blank; signature page follows]

[Signature Page to Warrant]

10

IN WITNESS WHEREOF, Company has caused this Warrant to be duly executed by its officer, thereunto duly authorized as of the date of issuance set forth on the first page hereof.

ABEONA THERAPEUTICS INC.

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Chief Financial Officer

AGREED AND ACCEPTED:

HOLDER:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: /s/ Sonia Gardner
Name: Sonia Gardner
Title: Member

[Signature Page to Warrant]

FORM OF SUBSCRIPTION

(To be signed only upon exercise of Warrant)

To: _____

- The undersigned, the holder of the within Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, (1) _____ (____) shares¹ (the "Shares") of Common Stock of _____ and herewith makes payment of _____ Dollars (\$_____) therefor, and requests that the certificates for such shares be issued in the name of, _____, whose address is _____.
- The undersigned hereby elects to convert _____ percent (____%) of the value of the Warrant pursuant to the provisions of Section 1(b) of the Warrant.

The undersigned acknowledges that it has reviewed the representations and warranties contained in Section 17 of this Warrant and by its signature below hereby makes such representations and warranties to Company.

Dated _____
Holder: _____
By: _____
Its: _____
(Address)

¹ Insert here the number of shares called for on the face of the Warrant (or, in the case of a partial exercise, the portion thereof as to which the Warrant is being exercised), in either case without making any adjustment for additional Warrant Shares or any other stock or other securities or property or cash which, pursuant to the adjustment provisions of the Warrant, may be issuable upon exercise.

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned, the holder of the within Warrant, hereby sells, assigns and transfers all of the rights of the undersigned under the within Warrant, with respect to the number of shares of Common Stock covered thereby set forth herein below, unto:

Name of Assignee	Address	No. of Shares
	Dated _____	_____
	Holder: _____	_____
	By: _____	_____
	Its: _____	_____

EXHIBIT "A"

[On letterhead of Company]

Reference is hereby made to that certain Warrant dated January 8, 2024 issued by ABEONA THERAPEUTICS INC., a Delaware corporation (the "Company"), to AVENUE VENTURE OPPORTUNITIES FUND, L.P., a Delaware limited partnership (the "Holder").

[IF APPLICABLE] The Warrant provides that the actual number and type of shares of Company's capital stock issuable upon exercise of the Warrant and the initial exercise price per share are to be determined by reference to one or more events or conditions subsequent to the issuance of the Warrant. Such events or conditions have now occurred or lapsed, and Company wishes to confirm the actual number of shares issuable and the initial exercise price. The provisions of this Supplement to Warrant are incorporated into the Warrant by this reference, and shall control the interpretation and exercise of the Warrant.

[IF APPLICABLE] Notice is hereby given pursuant to Section 4.5 of the Warrant that the following adjustment(s) have been made to the Warrant: [describe adjustments, setting forth details regarding method of calculation and facts upon which calculation is based].

This certifies that Holder is entitled to purchase from Company _____, at the Holder's option, either (i) (_____) fully paid and nonassessable shares of Company's _____ Stock at a price of _____ Dollars (\$_____) per share or (ii) (_____) fully paid and nonassessable shares of Company's _____ Stock at a price of _____ Dollars (\$_____) per share. The applicable Exercise Price and the

number of shares purchasable under the Warrant remain subject to adjustment as provided in Section 4 of the Warrant.

Executed this ___ day of _____, 20 ___.

ABEONA THERAPEUTICS INC.

By: _____

Name: _____

Title: _____

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE AND DISTRIBUTION THEREOF, AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF (A) SUCH REGISTRATION, (B) AN OPINION OF COUNSEL IN A FORM REASONABLY ACCEPTABLE TO COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED DUE TO AN EXEMPTION THEREFROM UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR (C) ABEONA THERAPEUTICS INC. OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS COMPLIANT WITH SUCH LAWS.

Date of Issuance: January 8, 2024

WARRANT TO PURCHASE
SHARES OF COMMON STOCK OF
ABEONA THERAPEUTICS INC.
(Void after January 8, 2029)

This certifies that AVENUE VENTURE OPPORTUNITIES FUND II, L.P., a Delaware limited partnership, or permitted assigns (“Holder”), for value received, is entitled to purchase from ABEONA THERAPEUTICS INC., a Delaware corporation (“Company”), the Applicable Number (hereinafter defined) of fully paid and nonassessable shares of the Company’s Common Stock (the “Common Stock”), for cash, at a purchase price per share equal to the Exercise Price (hereinafter defined). Holder may also exercise this Warrant on a cashless or “net issuance” basis as described in Section 1(b) below, and this Warrant shall be deemed to have been exercised in full on such basis on the Expiration Date (hereinafter defined), to the extent not fully exercised prior to such date. This Warrant is issued in connection with that certain Loan and Security Agreement and Supplement thereto, both of even date herewith (as amended, restated and supplemented from time to time, the “Loan Agreement” and the “Supplement”, respectively), between Company, as borrower, and Holder, as lender (“Lender”). Capitalized terms used herein and not otherwise defined in this Warrant shall have the meaning(s) ascribed to them in the Loan Agreement and the Supplement, unless the context would otherwise require.

In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated below:

“Applicable Number” means the number of shares of Common Stock purchasable hereunder obtained by dividing (x) \$1,920,000.00 by (y) the Exercise Price.

“Bona Fide Equity Financing” means the sale and issuance by Company of its equity securities (whether common shares, preferred shares and/or warrants) and/or convertible debt in each case for bona fide financing purposes with gross proceeds to Company in excess of \$10,000,000 over any 60-day period. The effective price per share of any Bona Fide Equity Financing shall be equal to (a) the gross proceeds of such Bona Fide Equity Financing received by the Company (plus, in the case of any securities convertible or exercisable for Common Stock (including warrants) the total cash exercise or conversion price payable upon conversion or exercise) *divided by* (b) the aggregate number of shares of Common Stock issued in such Bona Fide Equity Financing (plus all shares of Common Stock issuable upon exercise or conversion of such convertible or exercisable securities (including warrants)).

“Exercise Price” means the lower of \$4.75, and (b) the effective price per share of any Bona Fide Equity Financing that occurs prior to September 30, 2024.

“Warrant Shares” means the shares of Common Stock purchased or purchasable hereunder.

Subject to Sections 4.3 and 4.8, this Warrant may be exercised at any time or from time to time up to and including 5:00 p.m. (Pacific time) on January 8, 2029 (the “Expiration Date”), upon surrender to Company at its principal office at 6555 Carnegie Avenue, 4th Floor, Cleveland, OH 44103 (or at such other location as Company may advise Holder in writing) of this Warrant properly endorsed with the Form of Subscription attached hereto duly completed and signed and upon payment in cash or by check of the aggregate Exercise Price for the number of shares for which this Warrant is being exercised determined in accordance with the provisions hereof. The Exercise Price and the number of shares purchasable hereunder are subject to further adjustment as provided in Section 4 of this Warrant.

This Warrant is subject to the following terms and conditions:

1. Exercise; Issuance of Certificates; Payment for Shares

(a) Unless an election is made pursuant to clause (b) of this Section 1, this Warrant shall be exercisable at the option of Holder, at any time or from time to time, on or before the Expiration Date for all or any portion of the Warrant Shares (but not for a fraction of a share) which may be purchased hereunder for the Exercise Price multiplied by the number of Warrant Shares to be purchased. Company agrees that the Warrant Shares purchased under this Warrant shall be and are deemed to be issued to Holder as the record owner of such Warrant Shares as of the close of business on the date on which the form of subscription shall have been delivered and payment made for such Warrant Shares. Subject to the provisions of Section 2, certificates for the Warrant Shares so purchased, together with any other securities or property to which Holder is entitled upon such exercise, shall be delivered to Holder by Company at Company’s expense within a reasonable time after the rights represented by this Warrant have been so exercised. Except as provided in clause (b) of this Section 1, in case of a purchase of less than all the Warrant Shares, Company shall cancel this Warrant and execute and deliver a new Warrant or Warrants of like tenor for the balance of the Warrant Shares surrendered upon such purchase to Holder within a reasonable time. Each stock certificate or book-entry statement so delivered shall be in such denominations of Common Stock as may be requested by Holder and shall be registered in the name of such Holder or such other name as shall be designated by such Holder, subject to the limitations contained in Section 2.

(b) Holder, in lieu of exercising this Warrant by the cash payment of the Exercise Price pursuant to clause (a) of this Section 1, may elect, at any time on or before the Expiration Date, to surrender this Warrant and receive that number of shares of Common Stock computed using the following formula:

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

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock that Holder would otherwise have been entitled to purchase hereunder pursuant to Section 1(a) (or such lesser number of shares as Holder may designate in the case of a partial exercise of this Warrant).

A = the closing price on the last trading day prior to exercise of this Warrant.

B = the Exercise Price then in effect.

Election to exercise under this Section 1(b) may be made by delivering a signed form of subscription to Company via electronic mail or facsimile, to be followed by delivery of this Warrant. Notwithstanding anything to the contrary contained in this Warrant, if as of the close of business on the last business day preceding the Expiration Date this Warrant remains unexercised as to all or a portion of the Warrant Shares purchasable hereunder, then effective at 9:00 a.m. (Pacific time) on the Expiration Date, Holder shall be deemed, automatically and without need for notice to Company, to have elected to exercise this Warrant in full pursuant to the provisions of this Section 1(b), and upon surrender of this Warrant shall be entitled to receive that number of Warrant Shares computed using the above formula, provided that the application of such formula as of the Expiration Date yields a positive number for "X".

2. Limitation on Transfer.

(a) This Warrant and the Warrant Shares shall not be transferable except upon the conditions specified in this Section 2, which conditions are intended to ensure compliance with the provisions of the Securities Act of 1933, as amended (the "Securities Act"). Each holder of this Warrant or the Warrant Shares issuable hereunder will cause any proposed transferee of the Warrant or the Warrant Shares to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Section 2. Notwithstanding the foregoing and any other provision of this Section 2 but subject to the last sentence of Section 2(c), Holder may freely transfer all or part of this Warrant or the shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the shares, if any) at any time to any affiliate of Lender under the Loan Agreement, by giving Company notice of the portion of the Warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to Company for reissuance to the transferee(s) (and Holder, if applicable).

(b) Each certificate representing (i) this Warrant, (ii) the Warrant Shares, and (iii) any other securities issued in respect of the Warrant Shares issued upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall (unless otherwise permitted by the provisions of this Section 2 or unless such securities have been registered under the Securities Act or sold under Rule 144) be stamped or otherwise imprinted with a legend substantially in the following form (in addition to any legend required under applicable state securities laws):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE AND DISTRIBUTION THEREOF, AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF (A) SUCH REGISTRATION, (B) AN OPINION OF COUNSEL IN A FORM REASONABLY ACCEPTABLE TO COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED DUE TO AN EXEMPTION THEREFROM UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAWS OR (C) ABEONA THERAPEUTICS INC. OTHERWISE SATISFIES ITSELF THAT SUCH TRANSACTION IS COMPLIANT WITH SUCH LAWS.

(c) Holder of this Warrant and each person to whom this Warrant is subsequently transferred represents and warrants to Company and agrees (by acceptance of such transfer) that it will not transfer this Warrant (or securities issuable upon exercise hereof unless a registration statement under the Securities Act was in effect with respect to such securities at the time of issuance thereof) unless (i) there is an effective registration statement under the Securities Act and applicable state securities laws covering any such transaction, (ii) pursuant to Rule 144 under the Securities Act (or any other rule under the Securities Act relating to the disposition of securities), (iii) Company receives an opinion of counsel, reasonably satisfactory to Company, that an exemption from such registration is available or (iv) the Company otherwise satisfies itself that such transaction is exempt from registration. Notwithstanding the foregoing or any other provision of this Section 2, Holder shall not transfer this Warrant (or securities issuable upon exercise hereof, or securities issuable, directly or indirectly, upon conversion of such securities, if any) to any competitor of Company, as determined in good faith by the Board of Directors of Company (the "Board"), without the prior written consent of Company.

3. Shares to be Fully Paid; Reservation of Shares. Company covenants and agrees that all Warrant Shares will, upon issuance, be duly authorized, validly issued, fully paid and nonassessable and free from all preemptive rights of any stockholder and free of all taxes, liens and charges with respect to the issue thereof. Company further covenants and agrees that during the period within which the rights represented by this Warrant may be exercised, Company will at all times have authorized and reserved, for the purpose of issue or transfer upon exercise of the subscription rights evidenced by this Warrant, a sufficient number of shares of authorized but unissued Common Stock, or other securities and property, when and as required to provide for the exercise of the rights represented by this Warrant. Company will take all such action as may be necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any domestic securities exchange upon which the Common Stock may be listed. Company will not take any action which would result in any adjustment of the Exercise Price (as described in Section 4 hereof) (i) if the total number of Warrant Shares issuable after such action upon exercise of all outstanding warrants, together with all shares of Common Stock then outstanding and all shares of Common Stock then issuable upon exercise of all options and upon the conversion of all convertible securities then outstanding, would exceed the total number of shares of Common Stock then authorized by Company's Certificate of Incorporation, as amended and restated from time to time (the "Charter") or (ii) if the par value per share of the Common Stock would exceed the Exercise Price.

4. Adjustment of Exercise Price and Number of Shares. The Exercise Price and the number of shares purchasable upon the exercise of this Warrant shall be subject to adjustment from time to time upon the occurrence of certain events described in this Section 4. Upon each adjustment of the Exercise Price, Holder of this Warrant shall thereafter be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of Warrant Shares obtained by multiplying the Exercise Price in effect immediately prior to such adjustment by the number of Warrant Shares purchasable pursuant hereto immediately prior to such adjustment, and dividing the product thereof by the Exercise Price resulting from such adjustment.

4.1 Subdivision or Combination of Stock. In case Company shall at any time subdivide its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced, and conversely, in case the outstanding shares of Common Stock of Company shall be combined into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased.

4.2 Dividends. If at any time or from time to time the holders of Common Stock (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received or become entitled to receive,

(a) Common Stock, or any shares of stock or other securities whether or not such securities are at any time directly or indirectly convertible into or exchangeable for Common Stock, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution,

(b) any cash paid or payable including as a cash dividend, or

(c) Common Stock or other or additional stock or other securities or property (including cash) by way of spin off, split-up, reclassification, combination of shares or similar corporate rearrangement, (other than shares of Common Stock issued as a stock split, adjustments in respect of which shall be covered by the terms of Section 4.1 above), then and in each such case, Holder hereof shall, upon the exercise of this Warrant, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of stock and other securities and property (including cash in the cases referred to in clauses (b) and (c) above) which such Holder would hold on the date of such exercise had it been the holder of record of such Common Stock as of the date on which holders of Common Stock received or became entitled to receive such shares and/or all other additional stock and other securities and property.

4.3 Change of Control. In the event of a Change of Control (as hereinafter defined) where the per share price of the Company's Common Stock is less than or equal to two (2) times the Exercise Price, immediately prior to the consummation of such Change of Control, this Warrant shall be automatically exchanged for a number of shares of Company's securities, such number of shares being equal to the maximum number of shares issuable pursuant to the terms hereof (after taking into account all adjustments described herein) had Holder elected to exercise this Warrant immediately prior to the closing of such Change of Control and purchased all such shares pursuant to the cash exercise provision set forth in Section 1(a) hereof (as opposed to the cashless exercise provision set forth in Section 1(b)). Company acknowledges and agrees that Holder shall not be required to make any payment (cash or otherwise) for such shares as further consideration for their issuance pursuant to the terms of the preceding sentence. "Change of Control" shall mean any sale, license, or other disposition of all or substantially all of the assets of Company, any reorganization, consolidation, merger or other transaction involving Company where the holders of Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction; provided that an issuance of equity securities for the primary purpose of raising capital shall not be considered a Change of Control under this Warrant. This Warrant shall terminate upon Holder's receipt of the number of shares of Company's equity securities described in this Section 4.3.

4.4 Reserved.

4.5 Notice of Adjustment. Upon any adjustment of the Exercise Price, and/or any increase or decrease in the number of Warrant Shares purchasable upon the exercise of this Warrant, Company shall give written notice thereof to Holder pursuant to Section 12. The notice, which may be substantially in the form of Exhibit "A" attached hereto, shall be signed by Company's chief financial officer and shall state the Exercise Price resulting from such adjustment and the increase or decrease, if any, in the number of Warrant Shares purchasable at such price upon the exercise of this Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based.

4.6 Other Notices. If at any time:

- (a) Company shall declare any cash dividend upon its Common Stock;
- (b) Company shall declare any dividend upon its Common Stock payable in stock or make any special dividend or other distribution to the holders of its Common Stock;
- (c) Company shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;
- (d) there shall be any capital reorganization or reclassification of the capital stock of Company, or consolidation or merger of Company with, or sale of all or substantially all of its assets to, another entity;
- (e) there shall be a voluntary or involuntary dissolution, liquidation or winding-up of Company; or
- (f) Company shall take or propose to take any other action, notice of which is actually provided to holders of the Common Stock;

then, in any one or more of said cases, Company shall give Holder, pursuant to Section 12, (i) at least 15 days' prior written notice of the date on which the books of Company shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action and (ii) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action, at least 15 days' written notice of the date when the same shall take place. Any notice given in accordance with the foregoing clause (i) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto. Any notice given in accordance with the foregoing clause (ii) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, or other action as the case may be.

4.7 Certain Events. If any change in the outstanding Common Stock of Company or any other event occurs as to which the other provisions of this Section 4 are not strictly applicable or if strictly applicable would not fairly effect the adjustments to this Warrant in accordance with the essential intent and principles of such provisions, then the Board shall make in good faith an adjustment in the number and class of shares issuable under this Warrant, the Exercise Price and/or the application of such provisions, in accordance with such essential intent and principles, so as to protect such purchase rights as aforesaid. The adjustment shall be such as will give Holder of this Warrant upon exercise for the same aggregate Exercise Price the total number, class and kind of shares as Holder would have owned had this Warrant been exercised prior to the event and had Holder continued to hold such shares until after the event requiring adjustment.

4.8 Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 1 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable notice of exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the 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 the Holder and its Affiliates and Attribution Parties shall include the number of Warrant Shares issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, the Conversion Option set forth in the Supplement) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 4.8, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 4.8 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a notice of exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company 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 4.8, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the transfer agent setting forth the number of shares of Common Stock outstanding. Upon the written request of a Holder, the Company shall within one trading day confirm in writing to the 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 Company, including this Warrant, by the 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 written election by Holder which is delivered to the Company prior to the issuance of any Warrant Shares to such Holder, 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 exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 4.8, provided that the Beneficial Ownership Limitation in no event exceeds 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 exercise of this Warrant held by the Holder and the provisions of this Section 4.8 shall continue to apply. Any increase in the Beneficial Ownership

Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 4.8 to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

6

5. Issue Tax. The issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to Holder of this Warrant for any issue tax in respect thereof; provided, however, that Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the then Holder of this Warrant being exercised.

6. Closing of Books. Company will at no time close its transfer books against the transfer of this Warrant or of any Warrant Shares issued or issuable upon the exercise of this Warrant in any manner which interferes with the timely exercise of this Warrant.

7. No Voting Rights; Limitation of Liability. Nothing contained in this Warrant shall be construed as conferring upon Holder hereof the right to vote or to consent as a stockholder in respect of meetings of stockholders for the election of directors of Company or any other matters or any rights whatsoever as a stockholder of Company. No dividends or interest shall be payable in respect of this Warrant or the interest represented hereby or the shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised; provided, however, that if any dividends are due or paid at any time on the underlying securities for which this Warrant is exercisable, then upon exercise, the securities issued to Holder shall be deemed to have accrued dividends and be paid identical dividends from the date of this Warrant. No provisions hereof, in the absence of affirmative action by Holder to purchase shares of Common Stock, and no mere enumeration herein of the rights or privileges of Holder hereof, shall give rise to any liability of such Holder for the Exercise Price or as a stockholder of Company, whether such liability is asserted by Company or by its creditors.

8. Amendment of Charter. Unless Holder consents thereto in writing, Company shall not amend its Charter prior to the exercise of this Warrant if the Common Stock would be adversely affected by such amendment in a manner that would be more adverse to Holder with respect to the shares of Common Stock issuable upon the exercise of this Warrant than, and substantially dissimilar to, such amendment's effect on the other holders of Common Stock.

9. Registration Rights. If Company proposes to file a new registration statement under the Securities Act for purposes of effecting an underwritten offering of its equity securities for its own account or for the account of any other persons (other than (i) a registration of securities solely relating to an offering and sale to employees or directors of the Company pursuant to any employee stock plan or other employee benefit plan arrangement, and (ii) a registration of securities filed on Form S-4 or Form S-8 or any successor thereto), Holder shall be entitled to piggyback registration rights, and Company shall afford Holder an opportunity to include in that registration all or any part of the Warrant Shares issued upon exercise hereof, provided, however, that the Company's underwriters may limit the number of shares included in such underwritten offering if the underwriters determine that marketing factors require a limitation of the number of shares to be underwritten which may impact the number of Holder's Warrant Shares eligible to be registered in such offering.

7

10. Rights and Obligations Survive Exercise of Warrant. The rights and obligations of Company, of Holder of this Warrant and of the holder of Warrant Shares contained in Sections 6, 8, 9 and 18 shall survive the exercise of this Warrant.

11. Modification and Waiver. This Warrant and any provision hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of the same is sought.

12. Notices. Any notice, request or other document required or permitted to be given or delivered to Holder or Company shall be deemed to have been given (i) upon receipt if delivered personally or by courier (ii) upon confirmation of receipt if by electronic mail or facsimile or (iii) three business days after deposit in the US mail, with postage prepaid and certified or registered, to each such Holder at its address as shown on the books of Company or to Company at the address indicated therefor in the opening paragraphs of this Warrant (or at such other location as Company may advise Holder in writing).

13. Survival of Certain Obligations. All of the obligations of Company relating to the Warrant Shares issuable upon the exercise of this Warrant shall survive the exercise and termination of this Warrant. All of the covenants and agreements of Company shall inure to the benefit of and be binding upon the successors and permitted assigns of Holder. Company will, at the time of the exercise of this Warrant, in whole or in part, upon request of Holder but at Company's expense, acknowledge in writing its continuing obligation to Holder in respect of any rights (including, without limitation, any right to registration of the Warrant Shares) to which Holder shall continue to be entitled after such exercise in accordance with this Warrant; provided, that the failure of Holder to make any such request shall not affect the continuing obligation of Company to Holder in respect of such rights.

14. Descriptive Headings and Governing Law. The descriptive headings of the several sections and paragraphs of this Warrant are inserted for convenience only and do not constitute a part of this Warrant. This Warrant shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of Delaware.

15. Lost or Rejected Warrants or Stock Certificates. Company agrees that upon receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction, or mutilation of any Warrant or stock certificate and, in the case of any such loss, theft or destruction, upon receipt of an indemnity reasonably satisfactory to Company, or in the case of any such mutilation upon surrender and cancellation of such Warrant or stock certificate, Company at its expense will make and deliver a new Warrant or stock certificate, of like tenor, in lieu of the lost, stolen, destroyed or mutilated Warrant or stock certificate. If at any time the electronic original of this Warrant is rejected by any person (including, but not limited to, paying or escrow agents) or any person fails to comply with the terms of this Warrant based on being presented to such person as an electronic record or a printout hereof, or any signature hereto being in electronic form, Company shall, promptly upon Holder's request and without indemnity, execute and deliver to Holder, in lieu of electronic original versions of this Warrant, a new warrant of like tenor and amount in paper form with original ink signatures.

16. Fractional Shares. No fractional shares shall be issued upon exercise of this Warrant. Company shall, in lieu of issuing any fractional share, pay the holder entitled to such fraction a sum in cash equal to such fraction multiplied by the then effective Exercise Price.

8

17. Representations of Holder. With respect to this Warrant, Holder represents and warrants to Company as follows:

17.1 Experience. It is experienced in evaluating and investing in companies engaged in businesses similar to that of Company; it understands that investment in this Warrant involves substantial risks; it has made detailed inquiries concerning Company, its business and services, its officers and its personnel; the officers of Company have made available to Holder any and all written information it has requested; the officers of Company have answered to Holder's satisfaction all inquiries made by it; in making this investment it has relied upon information made available to it by Company; and it has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of investment in Company and it is able to bear the economic risk of that investment.

17.2 Investment. It is acquiring this Warrant and any Warrant Shares for investment for its own account and not with a view to, or for resale in connection

with, any distribution thereof. It understands that this Warrant and the Warrant Shares issuable upon exercise of this Warrant, have not been registered under the Securities Act, nor qualified under applicable state securities laws.

17.3 Rule 144. It acknowledges that this Warrant and the Common Stock issuable upon exercise of this Warrant must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. It has been advised or is aware of the provisions of Rule 144 promulgated under the Securities Act.

17.4 Access to Data. It has had an opportunity to discuss Company's business, management and financial affairs with Company's management and has had the opportunity to inspect Company's facilities.

17.5 Accredited Investor. It is, and at the time this Warrant was offered was, an "accredited investor" within the meaning of Regulation D promulgated under the Securities Act.

18. Additional Representations and Covenants of Company. Company hereby represents, warrants and agrees as follows:

18.1 Corporate Power. Company has all requisite corporate power and corporate authority to issue this Warrant and to carry out and perform its obligations hereunder.

18.2 Authorization. All corporate action on the part of Company, its directors and stockholders necessary for the authorization, execution, delivery and performance by Company of this Warrant has been taken. This Warrant is a valid and binding obligation of Company, enforceable in accordance with its terms.

18.3 Offering. Subject in part to the truth and accuracy of Holder's representations set forth in Section 17 hereof, the offer, issuance and sale of this Warrant is, and the Common Stock issuable upon exercise of this Warrant will be, exempt from the registration requirements of the Securities Act, and are exempt from the qualification requirements of any applicable state securities laws; and neither Company nor anyone acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

18.4 Listing; Stock Issuance. Company shall use its commercially reasonable efforts to secure and maintain the listing of the Common Stock or other securities issuable upon exercise of this Warrant, upon each securities exchange or over-the-counter market upon which securities of the same class or series issued by Company are listed, if any. Upon exercise of this Warrant, Company will use commercially reasonable efforts to cause the issuance of the shares of Common Stock purchased pursuant to the exercise to be issued in book-entry form in the names of Holder, its nominees or assignees, as appropriate at the time of such exercise.

18.5 Charter Documents. Company has provided Holder with true and complete copies of Company's Charter, By-Laws, and each Certificate of Designation or other charter document setting forth any rights, preferences and privileges of Company's capital stock, each as amended and in effect on the date of issuance of this Warrant.

9

18.6 Reserved.

18.7 Financial and Other Reports. Until the earlier of (a) the Expiration Date, and (b) the termination of this Warrant pursuant to Section 4.3, Company agrees to provide Holder at any time and from time to time with such information that is in the Company's possession as Holder may reasonably request for purposes of Holder's compliance (as determined by Holder in its reasonable discretion) with regulatory, accounting and reporting requirements applicable to Holder under law or GAAP (e.g., Fair Value Accounting Standard 157), including any 409A valuation reports (or equivalent reports) and budgets. Notwithstanding the foregoing, Company shall not be required to furnish to Holder the financial information described in this Section 18.7 in the event such financial information has been previously delivered to Lender pursuant to the Loan Agreement or produce any information not already in the Company's possession.

19. Counterparts; Facsimile; Electronic Signatures. This Warrant may be executed by one or more of the parties hereto in any number of separate counterparts, all of which together shall constitute one and the same instrument. Holder's execution and delivery of Holder's counterpart signature page to this Warrant via facsimile or electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docuSign.com) shall constitute Holder's effective execution and delivery of this Warrant and agreement to and acceptance of the terms hereof for all purposes. The fact that this Warrant is executed, signed, stored or delivered electronically shall not prevent the transfer by any Holder of this Warrant pursuant to Section 2 or the enforcement of the terms hereof. Physical possession of the original of this Warrant or any paper copy thereof shall confer no special status to the bearer thereof. In no event shall an original ink-signed paper copy of this Warrant be required for any exercise of Holder's rights hereunder, nor shall this Warrant or any physical copy hereof be required to be physically surrendered at the time of any exercise hereof.

[Remainder of this page intentionally left blank; signature page follows]

[Signature Page to Warrant]

10

IN WITNESS WHEREOF, Company has caused this Warrant to be duly executed by its officer, thereunto duly authorized as of the date of issuance set forth on the first page hereof.

ABEONA THERAPEUTICS INC.

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Chief Financial Officer

AGREED AND ACCEPTED:

HOLDER:

AVENUE VENTURE OPPORTUNITIES FUND II, L.P.

By: Avenue Venture Opportunities Partners II, LLC
Its: General Partner

By: /s/ Sonia Gardner
Name: Sonia Gardner
Title: Member

FORM OF SUBSCRIPTION

(To be signed only upon exercise of Warrant)

To: _____

- The undersigned, the holder of the within Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, (1) _____ (_____) shares¹ (the "Shares") of Common Stock of _____ and herewith makes payment of _____ Dollars (\$ _____) therefor, and requests that the certificates for such shares be issued in the name of, and delivered to, _____, whose address is _____.
- The undersigned hereby elects to convert _____ percent (____%) of the value of the Warrant pursuant to the provisions of Section 1(b) of the Warrant.

The undersigned acknowledges that it has reviewed the representations and warranties contained in Section 17 of this Warrant and by its signature below hereby makes such representations and warranties to Company.

Dated _____

Holder: _____

By: _____

Its: _____

(Address)

¹ Insert here the number of shares called for on the face of the Warrant (or, in the case of a partial exercise, the portion thereof as to which the Warrant is being exercised), in either case without making any adjustment for additional Warrant Shares or any other stock or other securities or property or cash which, pursuant to the adjustment provisions of the Warrant, may be issuable upon exercise.

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned, the holder of the within Warrant, hereby sells, assigns and transfers all of the rights of the undersigned under the within Warrant, with respect to the number of shares of Common Stock covered thereby set forth herein below, unto:

Name of Assignee	Address	No. of Shares
	Dated _____	_____
	Holder: _____	_____
	By: _____	_____
	Its: _____	_____

EXHIBIT "A"

[On letterhead of Company]

Reference is hereby made to that certain Warrant dated January 8, 2024 issued by ABEONA THERAPEUTICS INC., a Delaware corporation (the "Company"), to AVENUE VENTURE OPPORTUNITIES FUND II, L.P., a Delaware limited partnership (the "Holder").

[IF APPLICABLE] The Warrant provides that the actual number and type of shares of Company's capital stock issuable upon exercise of the Warrant and the initial exercise price per share are to be determined by reference to one or more events or conditions subsequent to the issuance of the Warrant. Such events or conditions have now occurred or lapsed, and Company wishes to confirm the actual number of shares issuable and the initial exercise price. The provisions of this Supplement to Warrant are incorporated into the Warrant by this reference, and shall control the interpretation and exercise of the Warrant.

[IF APPLICABLE] Notice is hereby given pursuant to Section 4.5 of the Warrant that the following adjustment(s) have been made to the Warrant: [describe adjustments, setting forth details regarding method of calculation and facts upon which calculation is based].

This certifies that Holder is entitled to purchase from Company _____, at the Holder's option, either (i) (_____) fully paid and nonassessable shares of Company's _____ Stock at a price of _____ Dollars (\$ _____) per share or (ii) (_____) fully paid and nonassessable shares of Company's _____ Stock at a price of _____ Dollars (\$ _____) per share. The applicable Exercise Price and the number of shares purchasable under the Warrant remain subject to adjustment as provided in Section 4 of the Warrant.

Executed this ____ day of _____, 20__.

ABEONA THERAPEUTICS INC.

By: _____

Name: _____

Title: _____

LOAN AND SECURITY AGREEMENT

Dated as of January 8, 2024

between

ABEONA THERAPEUTICS INC.,
a Delaware corporation
(“Company”),

MACROCHEM CORPORATION,
a Delaware corporation (“Macrochem”),
as a borrower

ABEONA THERAPEUTICS LLC,
an Ohio limited liability company (“Abeona OH”),
as a borrower
(together with Company and Macrochem, each individually, a “Borrower”,
and collectively, “Borrower”)

and

AVENUE VENTURE OPPORTUNITIES FUND II, L.P.,
a Delaware limited partnership, (“Avenue 2”),
as a lender,

and

AVENUE VENTURE OPPORTUNITIES FUND, L.P.,
a Delaware limited partnership (“Avenue”)
as administrative agent and collateral agent (in such capacity “Agent”)
and as a lender (in such capacity, together with Avenue 2, a “Lender” and collectively, the “Lenders”)

LOAN AND SECURITY AGREEMENT

Borrower, Lenders and Agent anticipate entering into one or more transactions pursuant to which each Lender agrees to make available to Borrower a loan facility governed by the terms and conditions set forth in this document and one or more Supplements executed by Borrower, Lenders and Agent which incorporate this document by reference. Each Supplement constitutes a supplement to and forms part of this document, and will be read and construed as one with this document, so that this document and the Supplement constitute a single agreement between the parties (collectively referred to as this “Agreement”).

Accordingly, the parties agree as follows:

ARTICLE 1 - INTERPRETATION

1.1 Definitions. The terms defined in Article 11 and in the Supplement will have the meanings therein specified for purposes of this Agreement.

1.2 Inconsistency. In the event of any inconsistency between the provisions of any Supplement and this document, the provisions of the Supplement will be controlling for the purpose of all relevant transactions.

ARTICLE 2 - THE COMMITMENT AND LOANS

2.1 The Commitment. Subject to the terms and conditions of this Agreement, each Lender agrees to make term loans to Borrower from time to time from the Funding Date and to and including the Termination Date in an aggregate principal amount not exceeding the Commitment. The Commitment is not a revolving credit commitment, and Borrower does not have the right to repay and reborrow hereunder; provided that Borrower may prepay the Loans as set forth in the Supplement. Each Loan requested by Borrower to be made on a single Business Day shall be for a minimum principal amount set forth in the Supplement, except to the extent the remaining Commitment is a lesser amount.

2.2 Notes Evidencing Loans; Repayment. Each Loan shall be evidenced by a separate Note payable to the order of each Lender, in the total principal amount of such Lender’s pro rata share of the Loan. Principal and interest of each Loan shall be payable at the times and in the manner set forth in the Note and regularly scheduled payments thereof shall be effected by automatic debit of the appropriate funds from Borrower’s Primary Operating Account as specified in the Supplement hereto. Repayment of the Loans and payment of all other amounts owed to each Lender will be paid by Borrower in the currency in which the same has been provided (i.e., United States Dollars).

2.3 Procedures for Borrowing.

(a) Other than a borrowing on the Funding Date, at least five (5) Business Days prior to a proposed Borrowing Date (or such lesser period of time as may be agreed upon by each Lender participating in the Loan in its sole discretion), Lenders shall have received from Borrower a written request for a borrowing hereunder (a “**Borrowing Request**”). Each Borrowing Request shall be in substantially the form of Exhibit “B” to the Supplement, shall be executed by a responsible executive or financial officer of Borrower, and shall state how much is requested, and shall be accompanied by such other information and documentation as Lenders may reasonably request, including the executed Note(s) for the Loan(s) covered by the Borrowing Request.

(b) No later than 1:00 p.m. Pacific Standard Time on the Borrowing Date, if Borrower has satisfied the conditions precedent in Article 4 by 9:00 a.m. Pacific Standard Time on such Borrowing Date, each Lender shall make its pro rata share of the Loan available to Borrower in immediately available funds.

2.4 Interest. Except as otherwise specified in the applicable Note and/or Supplement, Basic Interest on the outstanding principal balance of each Loan shall accrue daily at

the Designated Rate from the Borrowing Date. If the outstanding principal balance of such Loan is not paid at maturity, interest shall accrue at the Default Rate until paid in full, as further set forth herein.

2.5 Intentionally Omitted.

2.6 Interest Rate Calculation. Basic Interest, along with charges and fees under this Agreement and any Loan Document, shall be calculated for actual days elapsed on the basis of a 360-day year, which results in higher interest, charge or fee payments than if a 365-day year were used. In no event shall Borrower be obligated to pay Lenders interest, charges or fees at a rate in excess of the highest rate permitted by applicable law from time to time in effect.

2.7 Default Interest. Any unpaid payments in respect of the Obligations shall bear interest from their respective maturities, whether scheduled or accelerated, at the Default Rate, compounded monthly. Borrower shall pay such interest promptly on written demand (electronic mail being sufficient).

2.8 Late Charges. If Borrower is late in making any scheduled payment in respect of the Obligations by more than five (5) days, then Borrower agrees to pay a late charge of five percent (5%) of the payment due, but not less than \$50.00 for any one such delinquent payment. This late charge may be charged by Lenders for the purpose of defraying the expenses incidental to the handling of such delinquent amounts. Borrower acknowledges that such late charge represents a reasonable sum considering all of the circumstances existing on the date of this Agreement and represents a fair and reasonable estimate of the costs that will be sustained by Lenders due to the failure of Borrower to make timely payments. Borrower further agrees that proof of actual damages would be costly and inconvenient. Such late charge shall be paid without prejudice to the right of Lenders and Agent to collect any other amounts provided to be paid or to declare a default under this Agreement or any of the other Loan Documents or from exercising any other rights and remedies of Agent or Lenders.

2.9 Lender's Records. Principal, Basic Interest and all other sums owed under any Loan Document shall be evidenced by entries in records maintained by each Lender for such purpose. Each payment on and any other credits with respect to principal, Basic Interest and all other sums outstanding under any Loan Document shall be evidenced by entries in such records. Absent manifest error, Lenders' records shall be conclusive evidence thereof.

2.10 Grant of Security Interests; Filing of Financing Statements.

(a) To secure the timely payment and performance of all of the Obligations, Borrower hereby grants to Agent, for the ratable benefit of Lenders, continuing security interests in all of the Collateral. In connection with the foregoing, Borrower authorizes Agent to prepare and file any financing statements describing the Collateral without otherwise obtaining Borrower's signature or consent with respect to the filing of such financing statements. Such financing statements may indicate the Collateral as "all assets of the Debtor" or words of similar effect.

(b) In furtherance of Borrower's grant of the security interests in the Collateral pursuant to Section 2.10(a) above, Borrower hereby pledges and grants to Agent, for the ratable benefit of Lenders, a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the Closing Date or at any time thereafter following Agent's written request (electronic mail being sufficient), the certificate or certificates for the Shares will be delivered to Agent, accompanied by an instrument of assignment duly executed in blank by Borrower, unless such Shares have not been certificated. To the extent required by the terms and conditions governing the Shares, Borrower shall cause the books of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder and upon one (1) Business Day's written notice (electronic mail being sufficient) from Agent to Borrower, Agent may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Agent and cause new certificates representing such securities to be issued in the name of Agent or its transferee(s). Borrower will execute and deliver such documents, and take or cause to be taken such actions, as Agent may reasonably request to perfect or continue the perfection of Agent's security interest in the Shares. Except as provided in the following sentence, Borrower shall be entitled to exercise any voting rights with respect to the Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would constitute a violation of any of the terms of this Agreement. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and continuance of an Event of Default and Agent's one (1) Business Day's written notice (electronic mail being sufficient) to Borrower of Agent's intent to exercise its rights and remedies under this Agreement, including this Section 2.10(b).

2

(c) Borrower is and shall remain absolutely and unconditionally liable for the performance of its Obligations, including, without limitation, any deficiency by reason of the failure of the Collateral to satisfy all amounts due to each Lender under any of the Loan Documents.

(d) All Collateral pledged by Borrower under this Agreement and any Supplement shall secure the timely payment and performance of all Obligations. Except in connection with dispositions permitted by this Agreement or as otherwise expressly provided in this Agreement (in which case the Lien on the Collateral so transferred shall be automatically deemed released), no Collateral pledged under this Agreement or any Supplement shall be released until such time as all Obligations (other than inchoate indemnity obligations) have been satisfied and paid in full.

2.11 Warrant Original Issue Discount. The parties acknowledge and agree that the Loans and the Warrants are part of an "investment unit" within the meaning of Section 1273(c)(2) of the Internal Revenue Code. The parties agree that for purposes of allocating a portion of the issue price of the investment unit to the Warrants in accordance with Treasury Regulations Section 1.1273-2(h)(1), the fair market value of the Warrants is \$1,968,368.81. The Parties agree to file (and cause their Affiliates to file) all tax returns consistently with this Section 2.11 and not take any position inconsistent therewith.

ARTICLE 3 - REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants that, except as set forth in the Supplement or the Schedule of Exceptions hereto, if any, as of the Closing Date and each Borrowing Date:

3.1 Due Organization. Borrower is a corporation duly organized and validly existing in good standing under the laws of the jurisdiction of its incorporation, and is duly qualified to conduct business and is in good standing in each other jurisdiction in which its business is conducted or its properties are located, except where the failure to be so qualified would not reasonably be expected to have a Material Adverse Effect.

3.2 Authorization, Validity and Enforceability. The execution, delivery and performance of all Loan Documents executed by Borrower are within Borrower's powers, have been duly authorized, and are not in conflict with Borrower's certificate of incorporation or by-laws, or the terms of any charter or other organizational document of Borrower, as amended from time to time; and all such Loan Documents constitute valid and binding obligations of Borrower, enforceable in accordance with their terms (except as may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting the enforcement of creditors' rights in general, and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law).

3.3 Compliance with Applicable Laws. Borrower has complied with all licensing, permit and fictitious name requirements necessary to lawfully conduct the business in which it is engaged, and to any sales, leases or the furnishing of services by Borrower, including without limitation those requiring consumer or other disclosures, the noncompliance with which would have a Material Adverse Effect.

3.4 No Conflict. The execution, delivery, and performance by Borrower of all Loan Documents are not in conflict with any law, rule, regulation, order or directive, or any indenture, other material agreement, or undertaking to which Borrower is a party or by which Borrower may be bound or affected, which could reasonably be expected to have a Material Adverse Effect. Without limiting the generality of the foregoing, the issuance of the Warrant and the grant of registration rights in connection therewith do not violate

any agreement or instrument by which Borrower is bound or require the consent of any holders of Borrower's securities other than consents which have been obtained prior to the Closing Date.

3.5 No Litigation, Claims or Proceedings. There is no litigation, tax claim, proceeding or dispute pending, or, to the knowledge of Borrower, threatened in writing against or affecting Borrower, its property or the conduct of its business, in each case, that could result in liability or damages to Borrower in excess of \$250,000.

3

3.6 Correctness of Financial Statements. Borrower's financial statements (other than any projections which are subject to significant uncertainties and contingencies) which have been delivered to Lenders fairly and accurately, in all material respects, reflect Borrower's financial condition in accordance with GAAP (except, with respect to unaudited financial statements, for the absence of footnotes and subject to normal year-end adjustments) as of the latest date of such financial statements; and, since that date there has been no Material Adverse Change.

3.7 No Subsidiaries. As of the Closing Date, Borrower is not a majority owner of or in a control relationship with any other business entity.

3.8 Environmental Matters. To its knowledge after reasonable inquiry, Borrower has concluded that Borrower is in compliance with Environmental Laws, except to the extent a failure to be in such compliance would not reasonably be expected to have a Material Adverse Effect.

3.9 No Event of Default. No Default or Event of Default has occurred and is continuing.

3.10 Full Disclosure. None of the representations or warranties made by Borrower in the Loan Documents as of the date such representations and warranties are made or deemed made, and none of the written statements (other than projections or forecasts and information of a general economic or industry nature) contained in any exhibit, report, statement or certificate furnished by or on behalf of Borrower in connection with the Loan Documents (as modified or supplemented by other written information so furnished) (including disclosure materials delivered by or on behalf of Borrower to either Lender prior to the Closing Date or pursuant to Section 5.2 hereof), taken as a whole, contains any untrue statement of a material fact or omits any material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances under which they are made, not misleading as of the time when made or delivered (it being recognized by Agent that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

3.11 Specific Representations Regarding Collateral.

(a) Title. Except for the security interests created by this Agreement and Permitted Liens, (i) Borrower is and will be the unconditional legal and beneficial owner of the Collateral, and (ii) the Collateral is genuine and subject to no Liens. There exist no prior assignments or encumbrances of record with the U.S. Patent and Trademark Office or U.S. Copyright Office affecting any Collateral in favor of any third party, other than Permitted Liens.

(b) Rights to Payment. The names of the obligors, amounts owing to Borrower, due dates and all other information with respect to the Rights to Payment are and will be correctly stated in all material respects in all Records relating to the Rights to Payment. Borrower further represents and warrants, to its knowledge, that each Person appearing to be obligated on a Right to Payment has authority and capacity to contract and is bound as it appears to be.

(c) Location of Collateral. As of the Closing Date, Borrower's chief executive office, Inventory, Records, Equipment, and any other offices or places of business are located at the address(es) shown on the Supplement.

(d) Business Names. Other than its full corporate name, Borrower has not conducted business using any trade names or fictitious business names except as shown on the Supplement.

3.12 Copyrights, Patents, Trademarks and Licenses

(a) Borrower owns or is licensed or otherwise has the right to use all of the Patents, Trademarks, service marks, trade names, Copyrights, contractual franchises, authorizations and other similar rights that are reasonably necessary for the operation of its business, without known conflict with the rights of any other Person, except as could not reasonably be expected to have a Material Adverse Effect.

4

(b) To Borrower's knowledge, no slogan or other advertising device, product, process, method, substance, part or other material now employed, or now contemplated to be employed, by Borrower infringes upon any rights held by any other Person, except as could not reasonably be expected to have a Material Adverse Effect.

(c) No claim or litigation regarding any of the foregoing is pending or, to Borrower's knowledge, threatened in writing, and, to Borrower's knowledge, no patent, invention, device, application, principle or any statute, law, rule, regulation, standard or code is pending or proposed which, in either case, could reasonably be expected to have a Material Adverse Effect.

3.13 Regulatory Compliance. Borrower has met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. No event has occurred resulting from Borrower's failure to comply with ERISA that is reasonably likely to result in Borrower's incurring any liability that could reasonably be expected to have a Material Adverse Effect. Borrower is not required to be registered as an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Borrower is not engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T and U of the Board of Governors of the Federal Reserve System). Borrower has complied in all material respects with all the provisions of the Federal Fair Labor Standards Act.

3.14 Shares. Borrower has full power and authority to create a first priority Lien on the Shares and no disability or contractual obligation exists that would prohibit Borrower from pledging the Shares pursuant to this Agreement. To Borrower's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable. To Borrower's knowledge, the Shares are not the subject of any present or threatened (in writing) suit, action, arbitration, administrative or other proceeding, and Borrower knows of no reasonable grounds for the institution of any such proceedings.

3.15 Compliance with Anti-Corruption Laws. Borrower has not taken any action that would cause a violation of any anti-corruption law, including but not limited to, the Foreign Corrupt Practices Act, the United Kingdom Bribery Act, and all other applicable anti-corruption laws. Borrower, its employees, agents and representatives have not, directly or indirectly, offered, paid, given, promised or authorized the payment of any money, gift or anything of value to any person acting in an official capacity for any government department, agency or instrumentality, including state-owned or controlled companies or entities, and public international organizations, as well as a political party or official thereof or candidate for political office. None of Borrower's principals or staff are officers, employees or representatives of governments, government agencies, or government-owned or controlled enterprises.

3.16 Survival. The representations and warranties of Borrower as set forth in this Agreement survive the execution and delivery of this Agreement.

ARTICLE 4 - CONDITIONS PRECEDENT

4.1 Conditions to First Loan. The obligations of each Lender to make its first Loan hereunder is, in addition to the conditions precedent specified in Section 4.2 and in any Supplement, subject to the fulfillment of the following conditions and to the receipt by Lenders of the fees and documents described below, duly executed and in form and substance satisfactory to each Lender and its counsel:

(a) Resolutions. A certified copy of the resolutions of the Board of Directors of Borrower authorizing the execution, delivery and performance by Borrower of the Loan Documents.

(b) Incumbency and Signatures. A certificate of the secretary (or other officer performing the functions of secretary) of Borrower certifying the names of the officer or officers of Borrower authorized to sign the Loan Documents, together with a sample of the true signature of each such officer.

(c) Legal Opinion. (i) An opinion from Willkie Farr & Gallagher LLP, as special New York counsel to Borrower and (ii) an opinion from Lape Mansfield Nakasian & Gibson, LLC, as special Ohio counsel to Borrower, as to such matters as Agent or any Lender may reasonably request, in form and substance reasonably satisfactory to Agent and Lenders.

5

(d) Charter Documents. Copies of the organizational, constitutional and charter documents of Borrower (e.g., Articles or Certificate of Incorporation and Bylaws), as amended through the Closing Date, certified by an officer of Borrower as being true, correct and complete.

(e) This Agreement. Counterparts of this Agreement and the initial Supplement, with all schedules completed and attached thereto, and disclosing such information as is acceptable to Lenders.

(f) Financing Statements and Control Agreements. Filing copies (or other evidence of filing satisfactory to Agent and its counsel) of such UCC financing statements, collateral assignments, account control agreements in connection with Deposit Accounts and investment accounts set forth in Part 3, Section (i) of the Supplement other than Excluded Accounts, and termination statements, with respect to the Collateral as Agent shall request.

(g) Intellectual Property Security Agreement. An Intellectual Property Security Agreement executed by Borrower in form and substance satisfactory to Agent.

(h) Lien Searches. UCC lien, judgment, bankruptcy and tax lien searches of Borrower from such jurisdictions or offices as Agent may reasonably request, all as of a date reasonably satisfactory to Agent and its counsel.

(i) Good Standing Certificate. A certificate of status or good standing of Borrower as of a date acceptable to Agent from the jurisdiction of Borrower's organization and any foreign jurisdictions where Borrower is qualified to do business.

(j) Warrant. The Warrant issued by Borrower to each Lender exercisable for such number, type and class of shares of Borrower's capital stock, and for an initial exercise price as is specified therein.

(k) Insurance Certificates. Insurance certificates showing Agent as loss payee or additional insured.

(l) Fees. Reimbursement and payment of (i) Commitment fee, (ii) documentation fee and (iii) all reasonable fees and expenses incurred by Agent and the Lenders in connection with this Agreement or the Loan Documents.

(m) Other Documents. Such other documents and instruments as Agent or Lenders may reasonably request to effectuate the intents and purposes of this Agreement.

4.2 Conditions to All Loans. The obligation of each Lender to make its initial Loan and any subsequent Loan is subject to the following further conditions precedent that:

(a) No Default. No Default or Event of Default has occurred and is continuing or will result from the making of any such Loan, and the representations and warranties of Borrower contained in Article 3 of this Agreement and Part 3 of the Supplement are true and correct in all material respects as of the Borrowing Date of such Loan (except to the extent such representations and warranties relate solely to an earlier date, in which case the same are true and correct in all material respects as of such earlier date).

(b) No Material Adverse Change. No event has occurred that has had or could reasonably be expected to have a Material Adverse Change.

(c) Borrowing Request. Borrower shall have delivered to each Lender a Borrowing Request for such Loan.

(d) Note. Borrower shall have delivered an executed Note evidencing such Loan, substantially in the form attached to the Supplement as an exhibit.

(e) Supplemental Lien Filings. Borrower shall have executed and delivered such amendments or supplements to this Agreement and additional Security Documents, financing statements and third party waivers as Agent may reasonably request in connection with the proposed Loan, in order to create, protect or perfect or to maintain the perfection of Agent's Liens on the Collateral.

6

(f) Intentionally Omitted.

(g) Financial Projections. Borrower shall have delivered to Lenders Borrower's business plan and/or financial projections or forecasts as most recently approved by Borrower's Board of Directors.

ARTICLE 5 - AFFIRMATIVE COVENANTS

During the term of this Agreement and until its performance of all Obligations (other than inchoate indemnity obligations), Borrower will:

5.1 Notice to Lenders. Promptly give written notice to Lenders of:

(a) Any litigation or administrative or regulatory proceeding affecting Borrower where the amount claimed against Borrower is at the Threshold Amount or more, or where the granting of the relief requested could reasonably be expected to have a Material Adverse Effect; or of the acquisition by Borrower of any commercial tort claim with a value in excess of \$250,000, including brief details of such claim and such other information as Agent may reasonably request to enable Agent to better perfect its Lien in such commercial tort claim as Collateral.

(b) Any substantial dispute which may exist between Borrower and any governmental or regulatory authority that could reasonably be expected to have a Material Adverse Effect.

(c) The occurrence of any Default or any Event of Default.

(d) Any change in the location of any of Borrower's places of business or Collateral at least twenty (20) days in advance of such change (except for changes in location of (i) items of movable property such as laptop computers, (ii) Collateral with a book value less than \$100,000), or the establishment of any new, or the discontinuance of any existing, place of business.

(e) Any dispute or default by Borrower or any other party under any joint venture, partnering, distribution, cross-licensing, strategic alliance, collaborative research or manufacturing, license or similar agreement which could reasonably be expected to have a Material Adverse Effect.

(f) Any other matter which has resulted or might reasonably result in a Material Adverse Change.

(g) Any Subsidiary Borrower intends to acquire or create.

5.2 Financial Statements. Deliver to Lenders or cause to be delivered to Lenders, in form and detail satisfactory to Lenders the following financial and other information, which Borrower warrants shall be accurate and complete in all material respects:

(a) **Monthly Financial Statements.** As soon as available but no later than thirty (30) days after the end of each month, Borrower's unaudited balance sheet as of the end of such period, and Borrower's unaudited income statement and cash flow statement for such period and for that portion of Borrower's financial reporting year ending with such period and attested by a responsible financial officer of Borrower as being complete and correct in all material respects and fairly presenting Borrower's financial condition and the results of Borrower's operations as of the date(s) and for the period(s) covered thereby.

(b) **Year-End Financial Statements.** As soon as available but no later than ninety (90) days after the end of each financial reporting year, a complete copy of Borrower's audit report, which shall include balance sheet, income statement, statement of changes in equity and statement of cash flows for such year, prepared in accordance with GAAP and certified by an independent certified public accountant selected by Borrower and satisfactory to Lenders (the "**Accountant**"). The Accountant's certification shall not be qualified or limited due to a restricted or limited examination by the Accountant of any material portion of Borrower's records.

7

(c) **Compliance Certificates.** Simultaneously with the delivery of each set of financial statements referred to in paragraphs (a) and (b) above, a certificate of the chief financial officer of Borrower (or other executive officer) substantially in the form of Exhibit "C" to the Supplement (a "**Compliance Certificate**") stating, among other things, whether any Default or Event of Default exists on the date of such certificate, and if so, setting forth the details thereof and the action which Borrower is taking or proposes to take with respect thereto. If requested by any Lender, a Compliance Certificate also shall be delivered to Lenders on the Closing Date.

(d) **Government Required Reports.** Promptly after sending, issuing, making available, or filing, copies of all reports, proxy statements, and financial statements that Borrower sends or makes available generally to its stockholders (in their capacities as such), and, not later than five (5) days after actual filing or the date such filing was first due, all registration statements and reports that Borrower files or is required to file with the Securities and Exchange Commission, or any other equivalent governmental or regulatory authority having similar authority.

(e) **Other Information.** Such other statements, lists of property and accounts, budgets (as updated), sales projections, forecasts, reports, 409A valuation reports (as updated), operating plans, financial exhibits, capitalization tables (as updated) and information relating to equity and debt financings consummated after the Closing Date (including post-closing capitalization table(s)), or other information, in each case, as any Lender may from time to time reasonably request.

(f) **Board Packages.** In addition to the information described in Section 5.2(e), Borrower will promptly provide Lenders with copies of information and notices it supplies to its shareholders, and copies of all information, notices, minutes, consents and other materials, financial or otherwise, which Borrower provides to its Board of Directors (collectively, "**Board Packages**"); provided, however, that Borrower need not provide Lenders with copies of routine Board actions, such as option and stock grants under Borrower's equity incentive plan in the normal course of business; and provided, further, however, that such Board Packages may be redacted to the extent that (i) based on the advice of counsel, Borrower's Board of Directors determines such redaction is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential proprietary information, or for other similar reasons or (ii) such redacted material relates to Lenders (or Borrower's strategy regarding the Loans or Lenders).

Notwithstanding the foregoing, any documents required to be delivered pursuant to the terms of clauses (d) and (e) above (to the extent any such documents are included in materials otherwise filed with the Securities and Exchange Commission or other equivalent governmental or regulatory authority having similar authority) will be deemed to have been delivered to the extent Borrower posts the relevant documents to its website, to www.sec.gov, or to such other website and delivers a link thereto to Agent as notified to Lenders in lieu of delivering hard copies thereof to Agent.

5.3 Intentionally Omitted.

5.4 Existence. Maintain and preserve Borrower's legal existence, present form of business, and the rights, qualifications, licenses, permits, franchises, governmental authorizations, Intellectual Property rights, licenses and permits material to the conduct of its business, and maintain all requisite authority to conduct its business in each jurisdiction in which its business is conducted; and keep all Borrower's property in good working order and condition, ordinary wear and tear excepted.

5.5 Insurance. Obtain and keep in force insurance in such amounts and types as is usual in the type of business conducted by Borrower, with insurance carriers having a policyholder rating of not less than "A" and financial category rating of Class VII in "Best's Insurance Guide," unless otherwise approved by Lenders. Such insurance policies must be in form and substance reasonably satisfactory to Lenders, and shall list Agent as an additional insured or loss payee, as applicable, on endorsement(s) in form reasonably acceptable to Agent. Borrower shall furnish to Agent such endorsements within thirty (30) days following the Closing Date (or such longer period as Agent may agree to in writing in its sole discretion), and upon Lender's request, copies of any or all such policies. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to \$250,000 in the aggregate for all losses under all casualty policies during any twelve (12) month period, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Agent has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Agent, be payable to Agent on account of the Obligations.

8

5.6 Accounting Records. Maintain adequate books, accounts and records, and prepare all financial statements in accordance with GAAP, and in compliance with the regulations of any governmental or regulatory authority having jurisdiction over Borrower or Borrower's business; and permit employees or agents of Agent at such reasonable times as Agent may request (not to exceed one (1) time in any 12-month period unless an Event of Default has occurred and is continuing), on reasonable advance written notice (provided that no notice is required if an Event of Default has occurred and is continuing), at Borrower's expense (not to exceed \$2,500 in any 12-month period unless an Event of Default has occurred and is continuing), to inspect Borrower's properties, and to examine, review and audit, and make copies and memoranda of Borrower's books, accounts

and records; provided, however, that such books, accounts and records may be redacted to the extent that (i) based on the advice of counsel, Borrower's Board of Directors determines such redaction is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential proprietary information, or to comply with any applicable law or regulation, or (ii) such redacted material relates to Lenders (or Borrower's strategy regarding the Loans or Lenders).

5.7 Compliance with Laws. Comply with all laws (including Environmental Laws), rules, regulations applicable to, and all orders and directives of any governmental or regulatory authority having jurisdiction over, Borrower or Borrower's business, and with all material agreements to which Borrower is a party, except where the failure to so comply would not have a Material Adverse Effect.

5.8 Taxes and Other Liabilities. Pay all Borrower's Indebtedness when due (subject to any applicable grace or notice periods); pay all taxes and other governmental or regulatory assessments (individually or in the aggregate in excess of \$50,000) before delinquency or before any penalty attaches thereto, except as may be contested in good faith by the appropriate procedures and for which Borrower shall maintain appropriate reserves; and timely file all required tax returns (subject to any applicable extensions).

5.9 Special Collateral Covenants.

(a) Maintenance of Collateral; Inspection. Do all things reasonably necessary to maintain, preserve, protect and keep all Collateral in good working order and salable condition, ordinary wear and tear excepted, deal with the Collateral in all commercially reasonable ways as are considered good practice by owners of like property, and use the Collateral lawfully and, to the extent applicable, only as permitted by Borrower's insurance policies. Maintain, or cause to be maintained, complete and accurate Records, in all material respects, relating to the Collateral. Upon reasonable prior written (electronic mail being sufficient) notice (no less than two (2) Business Days unless an Event of Default has occurred and is continuing) at reasonable times during normal business hours (not more than once per 12-month period unless an Event of Default has occurred and is continuing), at Borrower's expense (not to exceed \$2,500 in any 12-month period unless an Event of Default has occurred and is continuing), Borrower hereby authorizes Agent and each Lenders' officers, employees, representatives and agents to inspect the Collateral and to discuss the Collateral and the Records relating thereto with Borrower's officers and employees, and, in the case of any Right to Payment, after consultation with Borrower, with any Person which is or may be obligated thereon; provided, however, that such Records and other related materials may be redacted to the extent that (i) based on the advice of counsel, Borrower's Board of Directors determines such redaction is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential proprietary information, or to comply with any applicable law or regulation, or (ii) such redacted material relates to Lenders (or Borrower's strategy regarding the Loans or Lenders).

(b) Documents of Title. Not sign or authorize the signing of any financing statement or other document naming Borrower as debtor or obligor, or acquiesce or cooperate in the issuance of any bill of lading, warehouse receipt or other document or instrument of title with respect to any Collateral, except those negotiated to Agent, or those naming Agent as secured party, or if solely to create, perfect or maintain a Permitted Lien.

9

(c) Change in Location or Name. Without at least twenty (20) days' prior written notice to Agent: (a) not relocate any Collateral (other than (i) moveable property such as laptop computers and (ii) other Collateral with a book value less than \$100,000) or Records, its chief executive office, or establish a place of business at a location other than as specified in the Supplement; and (b) not change its name, mailing address, location of Collateral (other than (i) moveable property such as laptop computers, (ii) Collateral with a book value less than \$100,000), jurisdiction of incorporation or formation (as applicable) or its legal structure.

(d) Decals, Markings. At the request of Required Lenders, firmly affix a decal, stencil or other marking to designated items of Equipment, indicating thereon the security interest of Agent.

(e) Agreement with Persons in Possession of Collateral. Use its commercially reasonable efforts to obtain and maintain such acknowledgments, consents, waivers and agreements (each a "**Waiver**") from the owner, operator, lienholder, mortgagee, landlord or any Person in possession of tangible Collateral in excess of \$10,000 per location as Lenders may require, all in form and substance reasonably satisfactory to Lenders. In addition, Lenders shall have the right to require Borrower to use its commercially reasonable efforts to provide Agent with a Waiver for any Collateral that is located in a jurisdiction that provides for statutory landlord's Liens and for any location at which the Person in possession of such Collateral has a Lien thereon; provided, however, that Borrower shall have thirty (30) days after the Closing Date to deliver to Agent a Waiver from the landlord of Borrower's primary leased location. Notwithstanding anything to the contrary in this Section 5.9(e), Borrower and Lender acknowledge and agree that all material Intellectual Property and Records that are maintained on items of Collateral for which Borrower is unable to provide a Waiver also shall be maintained or backed up in a manner sufficient that Agent shall be able to have access to such Intellectual Property and Records in accordance with the exercise of Agent's rights hereunder.

(f) Certain Agreements on Rights to Payment. Other than in the ordinary course of business, not make any material discount, credit, rebate or other reduction in the original amount owing on a Right to Payment or accept in satisfaction of a Right to Payment less than the original amount thereof.

5.10 Authorization for Automated Clearinghouse Funds Transfer. (i) Authorize each Lender and Agent to initiate debit entries to Borrower's Primary Operating Account, specified in the Supplement hereto, through Automated Clearinghouse ("**ACH**") transfers, in order to satisfy the regularly scheduled payments of principal and interest; (ii) provide each Lender at least twenty (20) days' notice of any change in Borrower's Primary Operating Account; and (iii) grant each Lender any additional authorizations necessary to begin ACH debits from a new account which becomes the Primary Operating Account.

5.11 Anti-Corruption Laws. Provide true, accurate and complete information, in all material respects, in all product orders, reimbursement requests and other communications relating to Borrower and its products.

ARTICLE 6 - NEGATIVE COVENANTS

During the term of this Agreement and until the performance of all Obligations (other than inchoate indemnity obligations), Borrower will not:

6.1 Indebtedness. Be indebted for borrowed money, the deferred purchase price of property, or leases which would be capitalized in accordance with GAAP; or become liable as a surety, guarantor, accommodation party or otherwise for or upon any obligation of any other Person, except:

- (a)** Indebtedness incurred for the acquisition of supplies, Inventory or other property or services on normal trade credit;
- (b)** Indebtedness incurred pursuant to one or more transactions permitted under Section 6.4;
- (c)** Indebtedness of Borrower under this Agreement or any other Loan Document;
- (d)** Subordinated Debt;
- (e)** any Indebtedness approved by Lenders prior to the Closing Date as shown on Schedule 6.1;

10

(f) Indebtedness secured by a Lien described in clause (c) of the defined term "Permitted Liens" not to exceed \$1,000,000 in aggregate principal amount outstanding at any time;

- (g) Indebtedness incurred under corporate credit cards not to exceed the Credit Card Limit at any time;
- (h) guaranties and similar surety obligations in respect of Indebtedness permitted under this Section 6.1;
- (i) Indebtedness consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business;
- (j) Indebtedness in the form of letters of credit in an aggregate face amount not to exceed \$250,000 at any time outstanding;
- (k) Indebtedness in respect of performance bonds, bid bonds, appeal bonds, surety bonds and similar obligations (other than in respect of other Indebtedness), in each case, provided in” the ordinary course of business in an aggregate amount not to exceed \$50,000 at any time;
- (l) other unsecured Indebtedness in an aggregate principal amount outstanding not to exceed \$200,000 at any time;
- (m) extensions, refinancings, modifications, amendments, restatements and renewals of any of the foregoing; provided that the principal amount thereof is not increased; and
- (n) earnouts, deferred purchase price obligations, purchase price adjustments, seller notes and similar obligations incurred in connection with Permitted Acquisitions.

6.2 Liens. Create, incur, assume or permit to exist any Lien, or grant any other Person a negative pledge that limits, restricts or prohibits the granting of any Lien on Borrower’s property in favor of Agent, on any of Borrower’s property, except, in each case, Permitted Liens and any negative pledge in respect of any asset subject to a Lien permitted by clause (c) of the definition of Permitted Liens. Borrower, Lenders and Agent agree that this covenant is not intended to constitute a lien, deed of trust, equitable mortgage, or security interest of any kind on any of Borrower’s real property, and this Agreement shall not be recorded or recordable. Notwithstanding the foregoing, however, violation of this covenant by Borrower shall constitute an Event of Default.

6.3 Dividends. Pay any dividends or purchase, redeem or otherwise acquire or make any other distribution with respect to any of Borrower’s capital stock, except (a) dividends or other distributions solely of capital stock of Borrower, (b) so long as no Event of Default has occurred and is continuing, repurchases of stock from employees, managers, consultants or contractors upon termination of employment or services under reverse vesting or similar repurchase plans not to exceed \$100,000 in any calendar year, (c) the conversion of Borrower’s convertible securities into other securities pursuant to the terms of such convertible securities or otherwise in exchange thereof, (d) the purchase, redemption or other acquisition of shares of Borrower’s capital stock with the proceeds received from a substantially concurrent issue of new shares of its capital stock, (e) (i) make cashless repurchases of equity interests deemed to occur upon exercise of stock options or warrants of such equity interests to represent a portion of the exercise price of such options or warrants and (ii) acquire (or withhold) their equity interests pursuant to any employee stock option or similar plan in satisfaction of withholding or similar taxes payable by any present or former officer, employee, director or member of management and make deemed repurchases in connection with the exercise of stock options, and (f) make payments of cash in lieu of fractional shares of equity interests arising out of stock dividends, splits or combinations in connection with exercises or conversions of options, warrants and other convertible securities.

6.4 Fundamental Changes. (a) Liquidate or dissolve; (b) enter into, or permit any of Borrower’s Subsidiaries to enter into, any Change of Control; or (c) acquire, or permit any of Borrower’s Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person unless such acquisition is permitted pursuant to Section 6.14(a) or a Permitted Acquisition. Notwithstanding anything to the contrary in this Section 6.4, Borrower may enter into a transaction that will constitute a Change of Control so long as: (i) the Person that results from such Change of Control (the “**Surviving Entity**”) shall have executed and delivered to Lenders an agreement in form and substance reasonably satisfactory to each Lender, containing an assumption by the Surviving Entity of the due and punctual payment and performance of all Obligations and performance and observance of each covenant and condition of Borrower in the Loan Documents; (ii) all such obligations of the Surviving Entity to Lenders shall be guaranteed by any Person that directly or indirectly owns or controls 50% or more of the voting stock of the Surviving Entity; (iii) immediately after giving effect to such Change of Control, no Event of Default or, event which with the lapse of time or giving of notice or both, would result in an Event of Default shall have occurred and be continuing; (iv) the credit risk to Lenders, in each Lender’s sole discretion, with respect to the Obligations and the Collateral shall not be increased; and (v) Borrower shall have provided Agent with prior written notice of any such Change of Control transaction. In determining whether the proposed Change of Control would result in an increased credit risk, each Lender may consider, among other things, changes in Borrower’s management team, employee base, access to equity markets, venture capital support, financial position and/or disposition of intellectual property rights which may reasonably be anticipated as a result of the Change of Control. In addition, (i) a Subsidiary may merge or consolidate into another Subsidiary and (ii) Borrower may consolidate or merge with any of Borrower’s Subsidiaries provided that Borrower is the continuing or surviving Person.

6.5 Sales of Assets. Sell, transfer, lease, license or otherwise dispose of (a “**Transfer**”) any of Borrower’s assets except (i) non-exclusive licenses of Intellectual Property in the ordinary course of business, provided that such licenses of Intellectual Property neither result in a legal transfer of title of the licensed Intellectual Property nor have the same effect as a sale of such Intellectual Property; (ii) Transfers of worn-out, obsolete or surplus property (each as determined by Borrower in its reasonable judgment); (iii) Transfers of Inventory in the ordinary course of business; (iv) Transfers constituting Permitted Liens; (v) Transfers permitted in Section 6.3, 6.4, 6.6 or 6.7 hereunder; (vi) Transfers of assets (other than Intellectual Property) for fair consideration and in the ordinary course of its business; and (vii) other Transfers in an aggregate amount not to exceed \$250,000 in any fiscal year.

6.6 Loans/Investments. Make or suffer to exist any loans, guaranties, advances, or investments (“**Investments**”), except:

- (a) accounts receivable in the ordinary course of Borrower’s business;
- (b) Investments in domestic certificates of deposit issued by, and other domestic investments with, financial institutions organized under the laws of the United States or a state thereof, having at least \$100,000,000 in capital and a rating of at least “investment grade” or “A” by Moody’s or any successor rating agency;
- (c) Investments in marketable obligations of the United States of America and in open market commercial paper given the highest credit rating by a national credit agency and maturing not more than one year from the creation thereof;
- (d) temporary advances to cover incidental expenses to be incurred in the ordinary course of business;
- (e) Investments in joint ventures, strategic alliances, licensing and similar arrangements customary in Borrower’s industry and which do not require Borrower to assume or otherwise become liable for the obligations of any third party not directly related to or arising out of such arrangement or, without the prior written consent of Required Lenders, require Borrower to transfer ownership of non-cash assets to such joint venture or other entity;
- (f) Investments in (i) one or more wholly-owned domestic Subsidiaries of Borrower, so long as in accordance with Section 6.14(a) of this Agreement, each such Person has been made a co-borrower hereunder or has executed and delivered to Lenders an agreement, in form and substance reasonably satisfactory to Required Lenders, containing a guaranty of the Obligations, and (ii) one or more wholly-owned foreign Subsidiaries of Borrower with the prior written consent of Required Lenders;
- (g) Investments approved by Lenders prior to the Closing Date as shown on Schedule 6.6;
- (h) Investments accepted in connection with Transfers permitted by Section 6.5;

(i) non-cash loans approved by Borrower's Board of Directors or Managing Member (as applicable) to employees, officers, managers or directors relating to the purchase of equity securities of Borrower pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors, limited to an aggregate total of \$250,000 at any time outstanding;

(j) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower's business;

(k) Investments permitted under Section 6.11;

(l) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions to, customers and suppliers in the ordinary course of business;

(m) Investments by wholly owned Subsidiaries in other wholly owned Subsidiaries or in Borrower;

(n) Investments consisting of deposit accounts in which Agent has a first priority perfected security interest to the extent required by Section 6.11;

(o) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(p) other Investments not otherwise permitted hereunder not exceeding \$100,000 in the aggregate in any twelve (12) month period; and

(q) Permitted Acquisitions.

6.7 Transactions with Related Persons. Directly or indirectly enter into any transaction with or for the benefit of a Related Person on terms more favorable to the Related Person than would have been obtainable in an "arms' length" dealing, except (a) sales of equity securities by Borrower and incurrence of Subordinated Debt for capital raising purposes, (b) commercially reasonable and customary compensation (including bonuses) and other benefits (including retirement, health, stock option and other benefit plans) and indemnification arrangements with Borrower's employees, officers, directors and managers approved by Borrower's Board of Directors or a duly authorized committee thereof, (c) any dividends permitted under Section 6.3, and (d) Investments permitted under clauses (d), (f), (i) or (m) of Section 6.6.

6.8 Other Business. Engage in any material line of business other than the business Borrower conducts as of the Closing Date and any business substantially similar or related or incidental thereto.

6.9 Financing Statements and Other Actions. Fail to execute and deliver to Agent all financing statements, notices and other documents (including, without limitation, any filings with the United States Patent and Trademark Office and the United States Copyright Office) from time to time reasonably requested by Agent to maintain a perfected first priority security interest in the Collateral in favor of Agent, subject to Permitted Liens; perform such other acts, and execute and deliver to Agent such additional conveyances, assignments, agreements and instruments, as Agent may at any time reasonably request in connection with the administration and enforcement of this Agreement or Agent's rights, powers and remedies hereunder.

6.10 Compliance. Become required to be registered as an "investment company" or controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Loan for such purpose. Fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply in all material respects with the Federal Fair Labor Standards Act or violate any law or regulation, which violation could reasonably be expected to have a Material Adverse Effect or a material adverse effect on the Collateral or the priority of Agent's Lien on the Collateral, or permit any of its subsidiaries to do any of the foregoing.

6.11 Other Deposit and Securities Accounts. Maintain any Deposit Accounts or accounts holding securities owned by Borrower except (i) Deposit Accounts and investment/securities accounts as set forth in the Supplement with respect to which an account control agreement has been executed and delivered to Agent, and (ii) other Deposit Accounts and securities/investment accounts, in each case, with respect to which Borrower and Agent shall have taken such action as Agent reasonably deems necessary to obtain a perfected first priority security interest therein, including without limitation the execution and delivery of an account control agreement, subject to Permitted Liens. The provisions of the previous sentence shall not apply to (a) Deposit Accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Lender as such and (b) Deposit Accounts subject to Liens permitted by clause (p) of the definition of Permitted Liens so long as the balance in any such Deposit Account does not exceed the lesser of (x) the face amount of the letter of credit secured by such Deposit Account or (y) \$250,000 (collectively, the "**Excluded Accounts**").

6.12 Prepayment of Indebtedness. Prepay, redeem or otherwise satisfy in any manner prior to the scheduled repayment thereof any Indebtedness (other than the Loans and Indebtedness permitted by Section 6.1 hereof). Notwithstanding the foregoing, the parties agree that the conversion or exchange into Borrower's equity securities of any Indebtedness (other than the Loans) and de minimis cash payments made in lieu of the issuance of fractional shares upon such conversion or exchange shall not be prohibited by this Section 6.12.

6.13 Repayment of Subordinated Debt. Repay, prepay, redeem or otherwise satisfy in any manner any Subordinated Debt, except in accordance with the terms of any subordination agreement among Borrower, Agent and the holder(s) of such Subordinated Debt. Notwithstanding the foregoing, each Lender agrees that the conversion or exchange into Borrower's equity securities of any Subordinated Debt and the payment of cash in lieu of fractional shares shall not be prohibited by this Section 6.13.

6.14 Subsidiaries.

(a) Acquire or create any Subsidiary, unless such Subsidiary becomes, at Lender's option, either a co-borrower hereunder or executes and delivers to Agent one or more agreements, in form and substance reasonably satisfactory to Required Lenders, containing a guaranty of the Obligations that is secured by first priority Liens on such Person's assets, subject to Permitted Liens. For clarity, the parties acknowledge and agree that Required Lenders shall have the exclusive right to determine whether any such Person will be made a co-borrower hereunder or a guarantor of the Obligations. Prior to the acquisition or creation of any such Subsidiary, Borrower shall notify Lenders thereof in writing, which notice shall contain the jurisdiction of such Person's formation and include a description of such Person's fully diluted capitalization and Borrower's purpose for its acquisition or creation of such Subsidiary.

(b) Sell, transfer, encumber or otherwise dispose of Borrower's ownership interest in any Subsidiary other than Permitted Liens.

(c) Cause or permit a Subsidiary to do any of the following: (i) grant Liens on such Subsidiary's assets, except for Liens that would constitute Permitted Liens if incurred by Borrower and Liens on any property held or acquired by such Subsidiary in the ordinary course of its business securing Indebtedness incurred or assumed for the purpose of financing all or any part of the cost of acquiring such property; provided, that such Lien attaches solely to the property acquired with such Indebtedness and that the principal amount of such Indebtedness does not exceed one hundred percent (100%) of the cost of such property; and (ii) issue any additional Shares, except to Borrower or a wholly owned Subsidiary of Borrower.

6.15 Leases. Create, incur, assume, or suffer to exist any obligation as lessee for the rental or hire of any personal property ("**Personal Property Leases**"), except for Personal Property Leases of Equipment in the ordinary course of business that do not in the aggregate require Borrower to make payments (including taxes, insurance, maintenance and similar expenses which Borrower is required to pay under the terms of any such lease) in any calendar year in excess of \$100,000 in aggregate amount. For the avoidance of doubt, this Section 6.15 will not be applicable to Indebtedness otherwise permitted under Section 6.1(f) of this Agreement.

6.16 Anti-Corruption Laws.

(a) Take any action that would cause a violation of any anti-corruption law, including but not limited to, the Foreign Corrupt Practices Act, the United Kingdom Bribery Act, and all other applicable anti-corruption laws.

(b) Directly or indirectly, offer, pay, give, promise or authorize the payment of any money, gift, or anything of value to any person acting in an official capacity for any government department, agency, or instrumentality, including state-owned or controlled companies or entities, and public international organizations, as well as a political party or official thereof or candidates for political office, except in compliance with applicable law.

ARTICLE 7 - EVENTS OF DEFAULT

7.1 Events of Default; Acceleration. Upon the occurrence and during the continuation of any Event of Default, the obligation of each Lender to make any additional Loan shall be suspended. The occurrence and continuation of any of the following (each, an "**Event of Default**") shall at the option of Agent, at the direction of the Required Lenders (1) make all sums of Basic Interest and principal, as well as any other Obligations and amounts owing under any Loan Documents, immediately due and payable without notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor or any other notices or demands, and (2) give Agent the right to exercise any other right or remedy provided by contract or applicable law:

(a) Borrower shall (i) fail to pay when due any principal or interest under this Agreement or any Note, or (ii) fail to pay any fees or other charges when due under any Loan Document (other than any Warrant), and such failure continues for three (3) Business Days or more after the same first becomes due; or an Event of Default as defined in any other Loan Document shall have occurred.

(b) Any representation or warranty made, or financial statement, certificate or other document provided, by Borrower under any Loan Document shall prove to have been false or misleading in any material respect when made or deemed made herein.

(c) If there occurs any circumstance or circumstances that could reasonably be expected to have a Material Adverse Effect.

(d) (i) Borrower shall fail to pay its debts generally as they become due; or (ii) Borrower shall commence any Insolvency Proceeding with respect to itself, an involuntary Insolvency Proceeding shall be filed against Borrower, or a custodian, receiver, trustee, assignee for the benefit of creditors, or other similar official, shall be appointed to take possession, custody or control of the properties of Borrower, and such involuntary Insolvency Proceeding, petition or appointment is acquiesced to by Borrower or is not dismissed within forty five (45) days; or (iii) the dissolution, winding up, or termination of the business or cessation of operations of Borrower (including any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of Borrower pursuant to the provisions of Borrower's charter documents); or (iv) Borrower shall take any corporate action for the purpose of effecting, approving, or consenting to any of the foregoing.

(e) Borrower shall be in default beyond any applicable period of grace or cure under any other agreement involving the borrowing of money, the purchase of property on credit, the advance of credit or any other monetary liability of any kind to Lenders or to any Person that permits such Person to accelerate the payment of such obligations, whether or not exercised, in an amount in excess of the Threshold Amount.

(f) Any governmental or regulatory authority shall take any judicial or administrative action, or any defined benefit pension plan maintained by Borrower shall have any unfunded liabilities, any of which, in the reasonable judgment of Required Lenders, could reasonably be expected to have a Material Adverse Effect.

(g) Except as otherwise permitted pursuant to Section 6.4, any sale, transfer or other disposition of all or a substantial or material part of the assets of Borrower, including without limitation to any trust or similar entity, shall occur.

(h) Any judgment(s) singly or in the aggregate in excess of the Threshold Amount (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be entered against Borrower which remain unsatisfied, unvacated or unstayed pending appeal for ten (10) or more days after entry thereof.

(i) Borrower shall fail to perform or observe any covenant contained in Article 6 of this Agreement.

(j) Borrower shall fail to perform or observe any covenant contained in Article 5 or elsewhere in this Agreement or any other Loan Document (other than a covenant which is dealt with specifically elsewhere in this Article 7) and, if capable of being cured, the breach of such covenant is not cured within 10 days after the sooner to occur of Borrower's receipt of notice of such breach from Agent or any Lender or the date on which such breach first becomes known to any officer of Borrower (the "**Notice Date**"); provided, however that if such breach is not capable of being cured within such 10-day period and Borrower timely notifies Lenders of such fact and Borrower diligently pursues such cure, then the cure period shall be extended to the date requested in Borrower's notice but in no event more than 30 days from the Notice Date; provided, further, that such 30-day opportunity to cure shall not apply in the case of any failure to perform or observe any covenant which has been the subject of a prior failure within the preceding 180 days or which is a willful and knowing breach by Borrower.

7.2 Remedies upon Default. Upon the occurrence and during the continuance of an Event of Default, Agent shall be entitled to, at its option, exercise any or all of the rights and remedies available to a secured party under the UCC or any other applicable law, and exercise any or all of its rights and remedies provided for in this Agreement and in any other Loan Document. The obligations of Borrower under this Agreement shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any Obligations is rescinded or must otherwise be returned by any Lender or Agent upon, on account of, or in connection with, the insolvency, bankruptcy or reorganization of Borrower or otherwise, all as though such payment had not been made.

7.3 Sale of Collateral. Upon the occurrence and during the continuance of an Event of Default, Agent may, at the direction of Required Lenders, sell all or any part of the Collateral, at public or private sales, to Lenders or a designee of Lenders, a wholesaler, retailer or investor, for cash, upon credit or for future delivery, and at such price or prices as Required Lenders may deem commercially reasonable. To the extent permitted by law, Borrower hereby specifically waives all rights of redemption and any rights of stay or appraisal which it has or may have under any applicable law in effect from time to time. Any such public or private sales shall be held at such times and at such place(s) as Required Lenders may determine. In case of the sale of all or any part of the Collateral on credit or for future delivery, the Collateral so sold may be retained by Agent until the selling price is paid by the purchaser, but neither Agent nor any Lender shall incur any liability in case of the failure of such purchaser to pay for the Collateral and, in case of any such failure, such Collateral may be resold. Agent may, at the direction of Required Lenders, instead of exercising its power of sale, proceed to enforce its security interest in the Collateral by seeking a judgment or decree of a court of competent jurisdiction. Without limiting the generality of the foregoing, if an Event of Default is in existence, in each case, at the direction of Required Lenders:

(1) Subject to the rights of any third parties, Agent may license, or sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any Copyrights, Patents or Trademarks included in the Collateral throughout the world for such term or terms, on such conditions and in such manner as Required Lenders shall in their sole discretion determine;

(2) Agent may (without assuming any obligations or liability thereunder), at any time and from time to time, enforce (and shall have the exclusive right to enforce) against any licensee or sublicensee all rights and remedies of Borrower in, to and under any Copyright Licenses, Patent Licenses or Trademark Licenses and take or refrain from taking any action under any thereof, and Borrower hereby releases Agent and each Lender from, and agrees to hold Agent and each Lender free and harmless from and against any claims arising out of, any lawful action so taken or omitted to be taken with respect thereto other than, with respect to Agent or any Lender, claims arising out of the gross negligence or willful misconduct of Agent or such Lender, respectively;

16

(3) Within one (1) Business Day after request by Agent, Borrower will execute and deliver to Agent a power of attorney, in form and substance reasonably satisfactory to Agent, for the implementation of any lease, assignment, license, sublicense, grant of option, sale or other disposition of a Copyright, Patent or Trademark. In the event of any such disposition pursuant to this clause 3, Borrower shall supply its know-how and expertise relating to the products or services made or rendered in connection with Patents, the manufacture and sale of the products bearing Trademarks, and its customer lists and other records relating to such Copyrights, Patents or Trademarks and to the distribution of said products, to Agent;

(4) If, at any time when Required Lenders shall determine to exercise its right to sell the whole or any part of the Shares hereunder, such Shares or the part thereof to be sold shall not, for any reason whatsoever, be effectively registered under the Securities Act (or any similar statute), then Agent may, at the direction of Required Lenders in their sole discretion (subject only to applicable requirements of law), sell such Shares or part thereof by private sale in such manner and under such circumstances as Required Lenders may deem necessary or advisable, but subject to the other requirements of this Article 7, and shall not be required to effect such registration or to cause the same to be effected. Without limiting the generality of the foregoing, in any such event, Agent may, at the direction of Required Lenders in their discretion, (i) in accordance with applicable securities laws proceed to make such private sale notwithstanding that a registration statement for the purpose of registering such Shares or part thereof could be or shall have been filed under the Securities Act (or similar statute), (ii) approach and negotiate with a single possible purchaser to effect such sale, and (iii) restrict such sale to a purchaser who is an accredited investor under the Securities Act and who will represent and agree that such purchaser is purchasing for its own account, for investment and not with a view to the distribution or sale of such Shares or any part thereof. In addition to a private sale as provided above in this Article 7, if any of the Shares shall not be freely distributable to the public without registration under the Securities Act (or similar statute) at the time of any proposed sale pursuant to this Article 7, then Agent shall not be required to effect such registration or cause the same to be effected but, in its discretion (subject only to applicable requirements of law), may require that any sale hereunder (including a sale at auction) be conducted subject to restrictions:

(A) as to the financial sophistication and ability of any Person permitted to bid or purchase at any such sale;

(B) as to the content of legends to be placed upon any certificates representing the Shares sold in such sale, including restrictions on future transfer thereof;

(C) as to the representations required to be made by each Person bidding or purchasing at such sale relating to such Person's access to financial information about Borrower or any of its Subsidiaries and such Person's intentions as to the holding of the Shares so sold for investment for its own account and not with a view to the distribution thereof; and

(D) as to such other matters as Agent may, in its discretion, deem necessary or appropriate in order that such sale (notwithstanding any failure so to register) may be effected in compliance with the Bankruptcy Code and other laws affecting the enforcement of creditors' rights and the Securities Act and all applicable state securities laws.

(5) Borrower recognizes that Agent may be unable to effect a public sale of any or all the Shares and may be compelled to resort to one or more private sales thereof in accordance with clause (4) above. Borrower also acknowledges that any such private sale may result in prices and other terms less favorable to the seller than if such sale were a public sale and, notwithstanding such circumstances, agrees that any such private sale shall not be deemed to have been made in a commercially unreasonable manner solely by virtue of such sale being private. Agent shall be under no obligation to delay a sale of any of the Shares for the period of time necessary to permit the applicable Subsidiary to register such securities for public sale under the Securities Act, or under applicable state securities laws, even if Borrower and/or the Subsidiary would agree to do so.

7.4 Borrower's Obligations upon Default. Upon the request of Agent, at the direction of Required Lenders, after the occurrence and during the continuance of an Event of Default, Borrower will:

(a) Assemble and make available to Agent the Collateral at such place(s) as Agent shall reasonably designate, segregating all Collateral so that each item is capable of identification; and

17

(b) Subject to the rights of any lessor, permit Agent, by Agent's officers, employees, agents and representatives, to enter any premises where any Collateral is located, to take possession of the Collateral, to complete the processing, manufacture or repair of any Collateral, and to remove the Collateral, or to conduct any public or private sale of the Collateral, all without any liability of Agent or any Lender for rent or other compensation for the use of Borrower's premises.

ARTICLE 8 - SPECIAL COLLATERAL PROVISIONS

8.1 Compromise and Collection. Borrower and Agent recognize that setoffs, counterclaims, defenses and other claims may be asserted by obligors with respect to certain of the Rights to Payment; that certain of the Rights to Payment may be or become uncollectible in whole or in part; and that the expense and probability of success of litigating a disputed Right to Payment may exceed the amount that reasonably may be expected to be recovered with respect to such Right to Payment. Borrower hereby authorizes Agent, after and during the continuance of an Event of Default, to compromise with the obligor, accept in full payment of any Right to Payment such amount as Agent shall negotiate with the obligor, or abandon any Right to Payment, in each case, as directed by Required Lenders. Any such action by Agent shall be considered commercially reasonable so long as Required Lenders have made the determination in good faith based on information known to them at the time Agent takes any such action.

8.2 Performance of Borrower's Obligations. Without having any obligation to do so, upon reasonable prior notice to Borrower, Agent may, at the direction of Required Lenders, perform or pay any obligation which Borrower has agreed to perform or pay under this Agreement (but has failed to timely perform or pay), including, without limitation, the payment or discharge of taxes or Liens levied or placed on or threatened against the Collateral, provided that Lenders shall fund amounts necessary to make such payments ratably in accordance with the principal amount of the Loans held by each Lender. In so performing or paying, Agent and Required Lenders shall determine the action to be taken and the amount necessary to discharge such obligations. Borrower shall reimburse Agent on demand for any amounts paid by Agent or any Lender pursuant to this Section, whereupon, Agent shall promptly deliver to Lenders such payments, which amounts shall constitute Obligations secured by the Collateral and shall bear interest from the date of demand at the Default Rate.

8.3 Power of Attorney. For the purpose of protecting and preserving the Collateral and Agent's and Lenders' rights under this Agreement, Borrower hereby irrevocably appoints Agent, with full power of substitution, as its attorney-in-fact with full power and authority, after the occurrence and during the continuance of an Event of Default, to do

any act which Borrower is obligated to do hereunder, as directed by Required Lenders; to exercise such rights with respect to the Collateral as Borrower might exercise, as directed by Required Lenders; to use such Inventory, Equipment, Fixtures or other property as Borrower might use, as directed by Required Lenders; to enter Borrower's premises; to give notice of Agent's security interest in, and to collect the Collateral, as directed by Required Lenders; and before or after Default, to execute and file in Borrower's name any financing statements, amendments and continuation statements, account control agreements or other Security Documents necessary or desirable to create, maintain, perfect or continue the perfection of Agent's security interests in the Collateral. Borrower hereby ratifies all that Agent shall lawfully do or cause to be done by virtue of this appointment.

8.4 Authorization for Agent to Take Certain Action. The power of attorney created in Section 8.3 is a power coupled with an interest and shall be irrevocable. The powers conferred on Agent hereunder and thereunder are solely to protect its interests in the Collateral and shall not impose any duty upon Agent to exercise such powers. Agent shall be accountable only for amounts that it actually receives as a result of the exercise of such powers and in no event shall Agent or any of its directors, officers, employees, agents or representatives be responsible to Borrower for any act or failure to act, except for gross negligence or willful misconduct. After the occurrence and during the continuance of an Event of Default, Agent may exercise this power of attorney without notice to or assent of Borrower, in the name of Borrower, or in Agent's own name, from time to time in Agent's sole discretion and at Borrower's expense. To further carry out the terms of this Agreement, after the occurrence and during the continuance of an Event of Default, Agent may, at the direction of Required Lenders:

(a) Execute any statements or documents or take possession of, and endorse and collect and receive delivery or payment of, any checks, drafts, notes, acceptances or other instruments and documents constituting Collateral, or constituting the payment of amounts due and to become due or any performance to be rendered with respect to the Collateral.

18

(b) Sign and endorse any invoices, freight or express bills, bills of lading, storage or warehouse receipts; drafts, certificates and statements under any commercial or standby letter of credit relating to Collateral; assignments, verifications and notices in connection with Accounts; or any other documents relating to the Collateral, including without limitation the Records.

(c) Use or operate Collateral or any other property of Borrower for the purpose of preserving or liquidating Collateral.

(d) File any claim or take any other action or proceeding in any court of law or equity or as otherwise deemed appropriate by Agent for the purpose of collecting any and all monies due or securing any performance to be rendered with respect to the Collateral.

(e) Commence, prosecute or defend any suits, actions or proceedings or as otherwise deemed appropriate by Agent for the purpose of protecting or collecting the Collateral. In furtherance of this right, upon the occurrence and during the continuance of an Event of Default, Agent may apply for the appointment of a receiver or similar official to operate Borrower's business.

(f) Prepare, adjust, execute, deliver and receive payment under insurance claims, and collect and receive payment of and endorse any instrument in payment of loss or returned premiums or any other insurance refund or return, and apply such amounts at Agent's sole discretion, toward repayment of the Obligations or replacement of the Collateral.

8.5 Application of Proceeds. Any Proceeds and other monies or property received by Agent pursuant to the terms of this Agreement or any Loan Document may be applied as follows:

First, to Agent, the aggregate amount of all documented costs, expenses, indemnities and other amounts required to be reimbursed to Agent, in its capacity as such, until paid in full;

Second, to Agent, for the ratable benefit of Lenders (in accordance with the portion funded by each Lender), the aggregate amount of all Obligations arising on account of payments made by Agent in accordance with Section 8.2, until repaid in full;

Third, to Lenders, ratably in accordance with principal amount of the Loans held by each Lender, an amount equal to the aggregate costs, expenses, indemnities or other amounts then required to be reimbursed to such Lender, until paid in full;

Fourth, to Lenders, ratably in accordance with aggregate amount of any fees, premiums or similar payments due to each Lender in respect of the Loans held by such Lender, an amount equal to the aggregate fees, premiums or other similar such payments due to such Lender in respect of the Loans, until paid in full;

Fifth, to Lenders, ratably in accordance with accrued and unpaid interest in respect of the Loans and the other Obligations due to each Lender, an amount equal to the aggregate accrued and unpaid interest on the Loans and other Obligations then due, until paid in full;

Sixth, to Lenders, ratably in accordance outstanding principal due to each Lender in respect of the Loans, an amount equal to the aggregate principal outstanding in respect of the Loans then due, until paid in full;

Seventh, to Agent and each Lender, ratably in accordance with any other Obligations due to such Lender, an amount equal to all other Obligations due and payable to Agent and each Lender, until paid in full; and

Last, the balance, if any, to Borrower or as otherwise required by applicable law.

8.6 Deficiency. If the Proceeds of any disposition of the Collateral are insufficient to cover all costs and expenses of such sale and the payment in full of all the Obligations, plus all other sums required to be expended or distributed by Agent or any Lender, then Borrower shall be liable for any such deficiency.

19

8.7 Agent Transfer. Upon the transfer of all or any part of the Obligations, Agent may transfer all or part of the Collateral and shall be fully discharged thereafter from all liability and responsibility with respect to such Collateral so transferred, and the transferee shall be vested with all the rights and powers of Agent hereunder with respect to such Collateral so transferred, but with respect to any Collateral not so transferred, Agent shall retain all rights and powers hereby given.

8.8 Agent's Duties.

(a) Agent shall use reasonable care in the custody and preservation of any Collateral in its possession. Without limitation on other conduct which may be considered the exercise of reasonable care, Agent shall be deemed to have exercised reasonable care in the custody and preservation of such Collateral if such Collateral is accorded treatment substantially equal to that which Agent accords its own property, it being understood that Agent shall not have any responsibility for ascertaining or taking action with respect to calls, conversions, exchanges, maturities, declining value, tenders or other matters relative to any Collateral, regardless of whether Agent has or is deemed to have knowledge of such matters; or taking any necessary steps to preserve any rights against any Person with respect to any Collateral. Under no circumstances shall Agent be responsible for any injury or loss to the Collateral, or any part thereof, arising from any cause beyond the reasonable control of Agent .

(b) Agent may at any time deliver the Collateral or any part thereof to Borrower and the receipt of Borrower shall be a complete and full acquittance for the Collateral so delivered, and Agent shall thereafter be discharged from any liability or responsibility therefor.

(c) Neither Agent, nor any of its directors, officers, employees, agents, attorneys or any other person affiliated with or representing Agent shall be liable for any claims, demands, losses or damages, of any kind whatsoever, made, claimed, incurred or suffered by Borrower or any other party through the ordinary negligence of Agent, or any of its directors, officers, employees, agents, attorneys or any other person affiliated with or representing Agent.

8.9 Termination of Security Interests and Loan Documents. Upon the payment in full of the Obligations (other than inchoate indemnity obligations) and satisfaction of all Borrower's obligations under this Agreement and the other Loan Documents (other than any Warrant), and if Lenders have no further obligations to make Loans in connection with their Commitments, the security interest granted hereby shall terminate, all rights to the Collateral shall revert to Borrower and this Agreement and the other Loan Documents shall terminate; provided that (i) those obligations, liabilities, covenants and terms that are expressly specified herein and in any other Loan Document as surviving that respective agreement's termination, including without limitation, Borrower's indemnity obligations set forth in this Agreement, shall continue to survive notwithstanding anything to the contrary set forth herein, and (ii) nothing set forth herein shall affect or be deemed to affect those obligations, liabilities, covenants and terms set forth in any warrant instrument issued to a Lender or set forth in any other equity securities or convertible debt securities of Borrower acquired by Lenders in connection with this Agreement. Upon any such termination, Agent shall return all Collateral in its possession or control to Borrower and, at Borrower's expense, execute and deliver to Borrower such documents as Borrower shall reasonably request to evidence such termination. In connection therewith, Borrower agrees to provide each Lender with such information as may be reasonably requested by such Lender as to whether the securities issuable upon the exercise of any Warrant issued in connection with this Agreement constitute "qualified small business stock" for purposes of Section 1202(c) of the Internal Revenue Code.

ARTICLE 9 - GENERAL PROVISIONS

9.1 Notices. Any notice given by any party under any Loan Document shall be in writing and personally delivered, sent by overnight courier, or United States mail, postage prepaid, or sent by electronic mail or facsimile, or other authenticated message, charges prepaid, to the other party's or parties' addresses shown on the Supplement. Each party may change the address or facsimile number to which notices, requests and other communications are to be sent by giving written notice of such change to each other party. Notice given by hand delivery shall be deemed received on the date delivered; if sent by overnight courier, on the next Business Day after delivery to the courier service; if by first class mail, on the third (3rd) Business Day after deposit in the U.S. Mail; and if by electronic mail or facsimile, on the date of transmission.

20

9.2 Binding Effect. The Loan Documents shall be binding upon and inure to the benefit of Borrower, Lenders, Agent and their respective successors and assigns; provided, however, that Borrower may not assign or transfer Borrower's rights or obligations under any Loan Document except as specifically permitted under Section 6.4 or in accordance with a Permitted Acquisition. Each Lender reserves the right to sell, assign, transfer, negotiate or grant participations in all or any part of, or any interest in, such Lender's rights and obligations under the Loan Documents provided that, so long as no Event of Default has occurred and is continuing, neither Lender shall assign any of such rights or obligations to any competitor of Borrower. In connection with any of the foregoing, Lenders and Agent may disclose all documents and information which Lenders and Agent now or hereafter may have relating to the Loans, Borrower, or its business, provided that any Person who receives such information shall have agreed in writing in advance to maintain the confidentiality of such information on terms no less favorable to Borrower than are set forth in Section 9.13 hereof.

9.3 No Waiver. Any waiver, consent or approval by Lenders of any Event of Default or breach of any provision, condition, or covenant of any Loan Document must be in writing and shall be effective only to the extent set forth in writing. No waiver of any breach or default shall be deemed a waiver of any later breach or default of the same or any other provision of any Loan Document. No failure or delay on the part of Agent or any Lender in exercising any power, right, or privilege under any Loan Document shall operate as a waiver thereof, and no single or partial exercise of any such power, right, or privilege shall preclude any further exercise thereof or the exercise of any other power, right or privilege. Lenders have the right at their sole option to continue to accept interest and/or principal payments due under the Loan Documents after default, and such acceptance shall not constitute a waiver of said default or an extension of the maturity of any Loan unless Lenders agree otherwise in writing.

9.4 Rights Cumulative. All rights and remedies existing under the Loan Documents are cumulative to, and not exclusive of, any other rights or remedies available under contract or applicable law.

9.5 Unenforceable Provisions. Any provision of any Loan Document executed by Borrower which is prohibited or unenforceable in any jurisdiction, shall be so only as to such jurisdiction and only to the extent of such prohibition or unenforceability, but all the remaining provisions of any such Loan Document shall remain valid and enforceable.

9.6 Accounting Terms. Except as otherwise provided in this Agreement, accounting terms and financial covenants and information shall be determined and prepared in accordance with GAAP. Notwithstanding anything to the contrary contained in this Section 9.6 or in the definition of "Capital Lease Obligations," any change in accounting for leases pursuant to GAAP resulting from the adoption of Financial Accounting Standards Board Accounting Standards Update No. 2016-02, Leases (Topic 842) ("FAS 842"), to the extent such adoption would require treating any lease (or similar arrangement conveying the right to use) as a capital lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2015, such lease shall not be considered a capital lease, and all calculations and deliverables under this Agreement or any other Loan Document shall be made or delivered, as applicable, in accordance therewith.

9.7 Indemnification; Exculpation. Borrower shall pay and protect, defend and indemnify each Lender, Agent and each Lender's and Agent's employees, officers, directors, shareholders, affiliates, correspondents, agents and representatives (other than Lender, collectively "**Indemnified Parties**") against, and hold each Lender, Agent and each of such Indemnified Parties harmless from, all claims, actions, proceedings, liabilities, damages, losses, expenses (including, without limitation, reasonable attorneys' fees and costs) and other amounts incurred by each Lender, Agent and each of such Indemnified Parties, arising from (i) the matters contemplated by this Agreement or any other Loan Documents, (ii) any dispute between Borrower and a third party, or (iii) any contention that Borrower has failed to comply with any law, rule, regulation, order or directive applicable to Borrower's business; **provided, however**, that this indemnification shall not apply to any of the foregoing to the extent incurred as the result of any Lender's, Agent's or any of such Indemnified Parties' gross negligence or willful misconduct. This indemnification shall survive the payment and satisfaction of all of Borrower's Obligations to Lenders.

21

9.8 Reimbursement. Borrower shall reimburse each Lender and Agent for all costs and expenses, including without limitation reasonable attorneys' fees and disbursements expended or incurred by each Lender and Agent in any arbitration, mediation, judicial reference, legal action or otherwise in connection with (a) the preparation and negotiation of the Loan Documents, (b) the amendment and enforcement of the Loan Documents, including without limitation during any workout, attempted workout, and/or in connection with the rendering of legal advice as to each Lender's and Agent's rights, remedies and obligations under the Loan Documents, (c) collecting any sum which becomes due to each Lender under any Loan Document, (d) any proceeding for declaratory relief, any counterclaim to any proceeding, or any appeal, or (e) the protection, preservation or enforcement of any rights of Lenders or Agent under the Loan Documents. For the purposes of this section, attorneys' fees shall include, without limitation, fees incurred in connection with the following: (1) contempt proceedings; (2) discovery; (3) any motion, proceeding or other activity of any kind in connection with an Insolvency Proceeding; (4) garnishment, levy, and debtor and third party examinations; and (5) post-judgment motions and proceedings of any kind, including without limitation any activity taken to collect or enforce any judgment. All of the foregoing costs and expenses shall be payable upon demand by any Lender or Agent, and if not paid within forty-five (45) days of presentation of invoices shall bear interest at the Default Rate.

9.9 Execution in Counterparts; Electronic Signatures. This Agreement and the other Loan Documents may be executed in any number of counterparts, each of which

shall be deemed an original, but all of which together shall constitute one and the same agreement. This Agreement and each of the other Loan Documents may be executed by electronic signatures. Borrower, Lenders and Agent expressly agree to conduct the transactions contemplated by this Agreement and the other Loan Documents by electronic means (including, without limitation, with respect to the execution, delivery, storage and transfer of this Agreement and each of the other Loan Documents by electronic means and to the enforceability of electronic Loan Documents). Delivery of an executed signature page to this Agreement and each of the other Loan Documents by facsimile or other electronic mail transmission (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) shall be effective as delivery of a manually executed counterpart hereof and thereof, as applicable. The words "execution," "signed," "signature" and words of like import herein shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

9.10 Entire Agreement. The Loan Documents are intended by the parties as the final expression of their agreement and therefore contain the entire agreement between the parties and supersedes all prior understandings or agreements concerning the subject matter hereof. This Agreement may be amended only in a writing signed by Borrower, each Lender and Agent.

9.11 Governing Law and Jurisdiction.

(a) THIS AGREEMENT AND THE LOAN DOCUMENTS SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK.

(b) ANY LEGAL ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT MAY BE BROUGHT IN THE COURTS OF THE STATE OF NEW YORK OR OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK, AND BY EXECUTION AND DELIVERY OF THIS AGREEMENT, EACH OF BORROWER, LENDERS AND AGENT CONSENTS, FOR ITSELF AND IN RESPECT OF ITS PROPERTY, TO THE NON-EXCLUSIVE JURISDICTION OF THOSE COURTS. EACH OF BORROWER, LENDERS AND AGENT IRREVOCABLY WAIVES ANY OBJECTION, INCLUDING ANY OBJECTION TO THE LAYING OF VENUE OR BASED ON THE GROUNDS OF FORUM NON CONVENIENS, WHICH IT MAY NOW OR HEREAFTER HAVE TO THE BRINGING OF ANY ACTION OR PROCEEDING IN SUCH JURISDICTION IN RESPECT OF THIS AGREEMENT OR ANY DOCUMENT RELATED HERETO. BORROWER, LENDERS AND AGENT EACH WAIVE PERSONAL SERVICE OF ANY SUMMONS, COMPLAINT OR OTHER PROCESS, WHICH MAY BE MADE BY ANY OTHER MEANS PERMITTED BY NEW YORK LAW.

22

9.12 Waiver of Jury Trial; Judicial Reference. TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW, BORROWER, LENDERS AND AGENT EACH WAIVES ITS RESPECTIVE RIGHTS TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS, OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY, IN ANY ACTION, PROCEEDING OR OTHER LITIGATION OF ANY TYPE BROUGHT BY ANY OF THE PARTIES AGAINST ANY OTHER PARTY OR ANY PARTICIPANT OR ASSIGNEE, WHETHER WITH RESPECT TO CONTRACT CLAIMS, TORT CLAIMS, OR OTHERWISE. BORROWER, LENDERS AND AGENT EACH AGREES THAT ANY SUCH CLAIM OR CAUSE OF ACTION SHALL BE TRIED BY A COURT TRIAL WITHOUT A JURY. WITHOUT LIMITING THE FOREGOING, THE PARTIES FURTHER AGREE THAT THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY IS WAIVED BY OPERATION OF THIS SECTION AS TO ANY ACTION, COUNTERCLAIM OR OTHER PROCEEDING WHICH SEEMS, IN WHOLE OR IN PART, TO CHALLENGE THE VALIDITY OR ENFORCEABILITY OF THIS AGREEMENT OR THE OTHER LOAN DOCUMENTS OR ANY PROVISION HEREOF OR THEREOF. THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS. This Section 9.12 shall survive the termination of this Agreement.

9.13 Confidentiality. Each Lender and Agent agrees to hold in confidence all confidential information that it receives from Borrower pursuant to the Loan Documents, except for disclosure as shall be reasonably required: (a) to legal counsel and accountants for each Lender and Agent (to the extent that such professional advisors are subject to the same obligations of confidentiality as set forth herein); (b) to other professional advisors to each Lender and Agent (to the extent that such professional advisors are subject to the same obligations of confidentiality as set forth herein); (c) to regulatory officials having jurisdiction over each Lender and Agent to the extent required by law; (d) to each Lender's and Agent's investors and prospective investors (to the extent that such investors or prospective investors are subject to the same confidentiality obligation set forth herein), and in each Lender's and Agent's SEC filings as required by law; (e) as required by law or legal process or in connection with any legal proceeding to which Lenders, Agent and Borrower are adverse parties; (f) in connection with a disposition or proposed disposition of any or all of each Lender's rights hereunder to any assignee or participant (to the extent that any transferee or proposed transferee is subject to the same confidentiality obligation set forth herein); (g) to each Lender's and Agent's subsidiaries or Affiliates in connection with their business with Borrower (subject to the same confidentiality obligation set forth herein); (h) as required by valid order of a court of competent jurisdiction, administrative agency or governmental body, or by any applicable law, rule, regulation, subpoena, or any other administrative or legal process, or by applicable regulatory or professional standards, including in connection with any judicial or other proceeding involving any Lender or Agent relating to this Agreement and the transactions contemplated hereby; and (i) as required in connection with each Lender's and Agent's examination or audit. For purposes of this section, each Lender, Agent and Borrower agree that "confidential information" shall mean any information regarding or relating to Borrower other than: (i) information which is or becomes generally available to the public other than as result of a disclosure by such Lender or Agent in violation of this section, (ii) information which becomes available to any Lender or Agent from any other source (other than Borrower) which such Lender or Agent does not know is bound by a confidentiality agreement with respect to the information made available, and (iii) information that such Lender or Agent knows on a non-confidential basis prior to Borrower disclosing it to such Lender or Agent. In addition, Borrower agrees that each Lender and Agent may upon prior written notice use Borrower's name, logo and/or trademark in connection with certain promotional materials that each Lender and Agent may disseminate to the public, including, but are not limited to, brochures, internet website, press releases and any other materials relating to the fact that each Lender and Agent has a financing relationship with Borrower.

ARTICLE 10 - AGENCY

10.1 Appointment. Each Lender hereby irrevocably appoints Avenue Venture Opportunities Fund, L.P. to act on its behalf as the administrative agent hereunder and under the other Loan Documents and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to the Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

10.2 Indemnity. Each Lender agrees to indemnify the Agent in its capacity as such (to the extent not reimbursed by Borrower and without limiting the obligation of Borrower to do so), according to its respective Commitment percentage in effect on the date on which indemnification is sought under this Section 10.2, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against the Agent in any way relating to or arising out of, this Agreement, a Supplement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by the Agent under or in connection with any of the foregoing. The agreements in this Section shall survive the payment of each Loan and all other amounts payable hereunder. Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of any Lender or as Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

23

10.3 Agent in Its Individual Capacity. The Person serving as the Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each

such Person serving as Agent hereunder in its individual capacity.

10.4 Exculpatory Provisions. The Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, the Agent shall not:

- (a) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing;
- (b) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Agent is required to exercise as directed in writing by Required Lenders, provided that the Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Agent to liability or that is contrary to any Loan Document or applicable law; and
- (c) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and the Agent shall not be liable for the failure to disclose, any information relating to Borrower or any of its Affiliates that is communicated to or obtained by any Person serving as Agent or any of its Affiliates in any capacity.

10.5 Duties. Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Agent.

10.6 Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, teletypes and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lenders with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

10.7 Collateral Agent. The Agent shall also act as the "collateral agent" under the Loan Documents, and each of the Lenders hereby irrevocably appoints and authorizes the Agent to act as the agent of such Lender for purposes of acquiring, holding and enforcing any and all Liens on Collateral granted by Borrower to secure any of the Obligations. Each Lender hereby authorizes Agent, on behalf of and for the ratable benefit of Lenders, in its capacity as collateral agent, to enter into any of the Loan Documents as secured party for purposes of acquiring, holding and enforcing all Liens on Collateral (and any other collateral from time to time securing the Obligations), and as Agent for and representative of Lender thereunder, and each Lender agrees to be bound by the terms of each such document. All powers, rights and remedies under the Loan Documents may be exercised solely by Agent for the benefit of Lenders and Agent in accordance with the terms thereof. In the event of a foreclosure on any of the Collateral pursuant to a public or private sale, either Agent or any Lender may be the purchaser of any or all of such Collateral at any such sale and Agent, as agent for and representative of Lenders (but not any Lender or Lenders in its or their respective individual capacities unless Required Lenders shall otherwise agree in writing) shall be entitled (subject to the proviso at the end of this sentence), for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Collateral sold at any such public sale, to use and apply any of the Obligations as a credit on account of the purchase price for any Collateral payable by Agent at such sale; provided however, that neither Agent nor any Lender shall "credit bid" at any foreclosure and/or other public or private sale absent the consent of the Required Lenders. Without limiting the generality of the foregoing, Agent is hereby expressly authorized to execute any and all documents (including releases) that bind Lenders with respect to (i) the Collateral and the rights of Lenders with respect thereto, as contemplated by and in accordance with the provisions of the Loan Documents, and (ii) any other subordination agreement with respect to any Subordinated Debt.

10.8 Successor Agents. Agent may resign upon thirty (30) days' written notice to Lenders and Borrower. If Agent shall resign in its capacity under this Agreement and the other Loan Documents, then the Required Lenders shall appoint a successor agent, whereupon such successor agent shall succeed to the rights, powers and duties of Agent in its capacity, and the term "Agent" shall mean such successor agent effective upon such appointment and approval, and the former Agent's rights, powers and duties as Agent in its capacity shall be terminated, without any other or further act or deed on the part of such former Agent or any of the parties to this Agreement or any Lender. If no applicable successor agent has accepted appointment as such Agent in its capacity by the date that is twenty (20) days following such retiring Agent's notice of resignation, such retiring Agent's resignation shall nevertheless thereupon become effective and Lenders shall assume and perform all of the duties of such Agent hereunder until such time, if any, as the Required Lenders appoint a successor agent as provided for above. After any retiring Agent's resignation as Agent, the provisions of this Section 10 shall inure to its benefit as to any actions taken or omitted to be taken by it while it was an Agent under this Agreement and the other Loan Documents.

ARTICLE 11 -- DEFINITIONS

The definitions appearing in this Agreement or any Supplement shall be applicable to both the singular and plural forms of the defined terms:

"Account" means any "account," as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest and, in any event, shall include, without limitation, all accounts receivable, book debts and other forms of obligations (other than forms of obligations evidenced by Chattel Paper, Documents or Instruments) now owned or hereafter received or acquired by or belonging or owing to Borrower (including, without limitation, under any trade name, style or division thereof) whether arising out of goods sold or services rendered by Borrower or from any other transaction, whether or not the same involves the sale of goods or services by Borrower (including, without limitation, any such obligation that may be characterized as an account or contract right under the UCC) and all of Borrower's rights in, to and under all purchase orders or receipts now owned or hereafter acquired by it for goods or services, and all of Borrower's rights to any goods represented by any of the foregoing (including, without limitation, unpaid seller's rights of rescission, replevin, reclamation and stoppage in transit and rights to returned, reclaimed or repossessed goods), and all monies due or to become due to Borrower under all purchase orders and contracts for the sale of goods or the performance of services or both by Borrower or in connection with any other transaction (whether or not yet earned by performance on the part of Borrower), now in existence or hereafter occurring, including, without limitation, the right to receive the proceeds of said purchase orders and contracts, and all collateral security and guarantees of any kind given by any Person with respect to any of the foregoing.

"Affiliate" means any Person which directly or indirectly controls, is controlled by, or is under common control with Borrower. "Control," "controlled by" and "under common control with" mean direct or indirect possession of the power to direct or cause the direction of management or policies (whether through ownership of voting securities, by contract or otherwise); provided, that control shall be conclusively presumed when any Person or affiliated group directly or indirectly owns five percent (5%) or more of the securities having ordinary voting power for the election of directors of a corporation.

"Agreement" means this Loan and Security Agreement and each Supplement thereto, as each may be amended or supplemented from time to time.

“**Bankruptcy Code**” means the Federal Bankruptcy Reform Act of 1978 (11 U.S.C. §101, et seq.), as amended.

“**Basic Interest**” means the rate of interest payable on the outstanding balance of each Loan at the applicable Designated Rate.

“**Borrowing Date**” means the Business Day on which the proceeds of a Loan are disbursed by any Lender.

“**Borrowing Request**” means a written request from Borrower in substantially the form of Exhibit “B” to the Supplement, requesting the funding of one or more Loans on a particular Borrowing Date.

“**Business Day**” means any day other than a Saturday, Sunday or other day on which commercial banks in New York City or San Francisco are authorized or required by law to close.

“**Capital Lease Obligations**” of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases or financing leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

“**Change of Control**” means: (a) any sale, license, or other disposition of all or substantially all of the assets of Borrower except as permitted by this Agreement; or (b) any reorganization, consolidation, merger, combination involving Borrower except as permitted by this Agreement; or (c) any transaction or series of related transactions in which any Person or two or more Persons acting in concert shall have acquired by contract or otherwise, the power to control the management of Borrower, or to control the equity interests of Borrower entitled to vote for members of the Board of Directors or equivalent governing body of Borrower on a fully-diluted basis (and taking into account all such securities that such Person or Persons have the right to acquire pursuant to any option right) representing 50% or more of the combined voting power of such securities (other than in connection with a sale to recognized investors in a transaction or series of transactions effected by Borrower for financing purposes, so long as Borrower identifies to Lenders the investors prior to the closing of the transaction and provides Lenders with a description of the material terms of such transaction).

“**Chattel Paper**” means any “chattel paper,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Closing Date**” means the date of this Agreement.

“**Collateral**” means all of Borrower’s right, title and interest in and to the following property, whether now owned or hereafter acquired and wherever located: (a) all Receivables; (b) all Equipment; (c) all Fixtures; (d) all General Intangibles (including all Intellectual Property); (e) all Inventory; (f) all Investment Property; (g) all Deposit Accounts; (h) all Shares; (i) all other Goods and personal property of Borrower, whether tangible or intangible and whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located; (j) all Records; and (k) all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing.

Notwithstanding the foregoing the term “Collateral” shall not include: (i) more than sixty-five percent (65%) of the issued and outstanding capital stock, membership units or other securities entitled to vote owned or held of record by Borrower in any Subsidiary that is a controlled foreign corporation (as defined in the Internal Revenue Code), provided that the Collateral shall include one hundred percent (100%) of the issued and outstanding non-voting capital stock of such Subsidiary; (ii) “intent-to-use” trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise, but only to the extent the granting of a security interest in such “intent to use” trademarks would be contrary to applicable law; (iii) any equipment not financed by Lenders to the extent the granting of a security interest therein is prohibited by or would constitute a default under any agreement or document governing such property (but only to the extent such prohibition is enforceable under applicable law); provided that upon the termination or lapsing of any such prohibition, such property shall automatically be part of the Collateral; and provided further that the provisions of this clause shall in no case exclude from the definition of “Collateral” any Accounts, proceeds of the disposition of any property, or general intangibles consisting of rights to payment, all of which shall at all times constitute “Collateral”; (iv) any contract, Instrument or Chattel Paper in which Borrower has any right, title or interest if and to the extent such contract, Instrument or Chattel Paper includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of Borrower therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such contract, Instrument or Chattel Paper to enforce any remedy with respect thereto; or (v) the Excluded Accounts; provided, however, that the foregoing exclusions in clauses (iii) and (iv) shall not apply if (A) such prohibition has been waived or such other person has otherwise consented to the creation hereunder of a security interest in such contract, Instrument or Chattel Paper, or (B) such prohibition would be rendered ineffective pursuant to Sections 9-407(a) or 9-408(a) of the UCC, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code or principles of equity); provided, further, that immediately upon the ineffectiveness, lapse or termination of any such provision, the term “Collateral” shall include, and Borrower shall be deemed to have granted a security interest in, all its rights, title and interests in and to such contract, Instrument or Chattel Paper as if such provision had never been in effect; and provided further that the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect Agent’s unconditional continuing security interest in and to all rights, title and interests of Borrower in or to any payment obligations or other rights to receive monies due or to become due under any such contract, Instrument or Chattel Paper and in any such monies and other proceeds of such contract, Instrument or Chattel Paper.

“**Commitment**” means the obligation of each Lender to make Loans to Borrower up to the aggregate principal amount set forth in the Supplement.

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

“**Copyrights**” means all of the following now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest: (i) all copyrights, whether registered or unregistered, held pursuant to the laws of the United States, any State thereof or of any other country; (ii) all registrations, applications and recordings in the United States Copyright Office or in any similar office or agency of the United States, any State thereof or any other country; (iii) all continuations, renewals or extensions thereof; and (iv) any registrations to be issued under any pending applications.

“**Credit Card Limit**” means \$150,000; provided that, upon Borrower’s achievement of the Tranche 2 Milestone (as defined in the Supplement), the Credit Card Limit shall automatically increase to \$350,000.

“**Default**” means an event which with the giving of notice, passage of time, or both would constitute an Event of Default.

“**Default Rate**” means the applicable Designated Rate plus five percent (5%) per annum.

“**Deposit Accounts**” means any “deposit accounts,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Designated Rate**” means the rate of interest per annum described in the Supplement as being applicable to an outstanding Loan from time to time.

“**Documents**” means any “documents,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Dollars**” or “**\$**” means lawful currency of the United States.

“**Environmental Laws**” means all federal, state or local laws, statutes, common law duties, rules, regulations, ordinances and codes, together with all administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any governmental authorities, in each case relating to environmental, health, or safety matters.

“**Equipment**” means any “equipment,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest and any and all additions, substitutions and replacements of any of the foregoing, wherever located, together with all attachments, components, parts, equipment and accessories installed thereon or affixed thereto.

“**Event of Default**” means any event described in Section 7.1.

“**Excluded Account**” has the meaning assigned to such term in Section 6.11.

“**Fixtures**” means any “fixtures,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Funding Date**” means the date on which all Conditions Precedent in Section 4.1 have been satisfied.

“**GAAP**” means generally accepted accounting principles and practices consistent with those principles and practices promulgated or adopted by the Financial Accounting Standards Board and the Board of the American Institute of Certified Public Accountants, their respective predecessors and successors. Subject to Section 9.6, each accounting term used but not otherwise expressly defined herein shall have the meaning given it by GAAP.

“**General Intangibles**” means any “general intangibles,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest and, in any event, shall include, without limitation, all right, title and interest that Borrower may now or hereafter have in or under any contract, all customer lists, Copyrights, Trademarks, Patents, websites, domain names, and all applications therefor and reissues, extensions, or renewals thereof, other items of, and rights to, Intellectual Property, interests in partnerships, joint ventures and other business associations, Licenses, permits, trade secrets, proprietary or confidential information, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data bases, data, skill, expertise, experience, processes, models, drawings, materials and records, goodwill (including, without limitation, the goodwill associated with any Trademark, Trademark registration or Trademark licensed under any Trademark License), claims in or under insurance policies, including unearned premiums, uncertificated securities, money, cash or cash equivalents, deposit, checking and other bank accounts, rights to sue for past, present and future infringement of Copyrights, Trademarks and Patents, rights to receive tax refunds and other payments and rights of indemnification.

“**Goods**” means any “goods,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Indebtedness**” of any Person means at any date, without duplication and without regard to whether matured or unmatured, absolute or contingent: (i) all obligations of such Person for borrowed money; (ii) all obligations of such Person evidenced by bonds, debentures, notes, or other similar instruments; (iii) all obligations of such Person to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business; (iv) all Capital Lease Obligations; (v) all obligations of such Person to reimburse or prepay any bank or other Person in respect of amounts paid under a letter of credit, banker’s acceptance, or similar instrument, whether drawn or undrawn; (vi) all obligations of such Person to purchase securities which arise out of or in connection with the sale of the same or substantially similar securities; (vii) all obligations of such Person to purchase, redeem, exchange, convert or otherwise acquire for value any capital stock of such Person or any warrants, rights or options to acquire such capital stock, now or hereafter outstanding, except to the extent that such obligations remain performable solely at the option of such Person; (viii) all obligations to repurchase assets previously sold (including any obligation to repurchase any accounts or chattel paper under any factoring, receivables purchase, or similar arrangement); (ix) obligations of such Person under interest rate swap, cap, collar or similar hedging arrangements; and (x) all obligations of others of any type described in clause (i) through clause (ix) above guaranteed by such Person.

“**Insolvency Proceeding**” means with respect to a Person (a) any case, action or proceeding before any court or other governmental authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors with respect to such Person, or (b) any general assignment for the benefit of creditors, composition, marshalling of assets for creditors, or other, similar arrangement in respect of such Person’s creditors generally or any substantial portion of its creditors, undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code, but in each case, excluding any avoidance or similar action against such Person commenced by an assignee for the benefit of creditors, bankruptcy trustee, debtor in possession, or other representative of another Person or such other Person’s estate.

“**Instruments**” means any “instrument,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Intellectual Property**” means all of Borrower’s Copyrights, Trademarks, Patents, Licenses, trade secrets, source codes, customer lists, proprietary or confidential information, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data bases, skill, expertise, experience, processes, models, drawings, materials, records and goodwill associated with the foregoing.

“**Intellectual Property Security Agreement**” means any Intellectual Property Security Agreement executed and delivered by Borrower in favor of Agent, as the same may be amended, supplemented, or restated from time to time.

“**Inventory**” means any “inventory,” as such term is defined in the UCC, wherever located, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest, and, in any event, shall include, without limitation, all inventory, goods and other personal property that are held by or on behalf of Borrower for sale or lease or are furnished or are to be furnished under a contract of service or that constitute raw materials, work in process or materials used or consumed or to be used or consumed in Borrower’s business, or the processing, packaging, promotion, delivery or shipping of the same, and all finished goods, whether or not the same is in transit or in the constructive, actual or exclusive possession of Borrower or is held by others for Borrower’s account, including, without limitation, all goods covered by purchase orders and contracts with suppliers and all goods billed and held by suppliers and all such property that may be in the possession or custody of any carriers, forwarding agents, truckers, warehousemen, vendors, selling agents or other Persons.

“**Investment Property**” means any “investment property,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“**Letter-of-Credit Rights**” means any “letter-of-credit rights,” as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest, including any right to payment under any letter of credit.

“License” means any Copyright License, Patent License, Trademark License or other license of rights or interests now held or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest and any renewals or extensions thereof.

“Lien” means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, any lease in the nature of a security interest, and the filing of any financing statement (other than a precautionary financing statement with respect to a lease that is not in the nature of a security interest) under the UCC or comparable law of any jurisdiction.

“Loan” has the meaning specified in the Supplement.

“Loan Documents” means, individually and collectively, this Agreement, each Supplement, each Note, the Intellectual Property Security Agreement, and any other security or pledge agreement(s), any Warrant issued by Borrower in connection with this Agreement, and all other contracts, instruments, addenda and documents executed in connection with this Agreement or the extensions of credit which are the subject of this Agreement.

29

“Material Adverse Effect” or **“Material Adverse Change”** means (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties, or condition (financial or otherwise) of Borrower; (b) a material impairment of the ability of Borrower to perform under any Loan Document; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against Borrower of any Loan Document.

“Note” means a promissory note substantially in the form attached to the Supplement as Exhibit “A”, executed by Borrower evidencing each Loan.

“Obligations” means all debts, obligations and liabilities of Borrower to each Lender or Agent now or hereafter made, incurred or created under, pursuant to or in connection with this Agreement or any other Loan Document (other than the Warrant), whether voluntary or involuntary and however arising or evidenced, whether direct or acquired by such Lender or Agent by assignment or succession, whether due or not due, absolute or contingent, liquidated or unliquidated, determined or undetermined, and whether Borrower may be liable individually or jointly, or whether recovery upon such debt may be or become barred by any statute of limitations or otherwise unenforceable; and all renewals, extensions and modifications thereof; and all attorneys’ fees and costs incurred by each Lender and Agent in connection with the collection and enforcement thereof as provided for in any such Loan Document. Notwithstanding the foregoing, Borrower’s obligations under any warrants (including the Warrants) issued to Lender or its designated affiliate shall not be “Obligations” hereunder.

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

“Patents” means all of the following property now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest: (a) all letters patent of, or rights corresponding thereto in, the United States or any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto in, the United States or any other country, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country; (b) all reissues, continuations, continuations-in-part or extensions thereof; (c) all petty patents, divisionals, and patents of addition; and (d) all patents to be issued under any such applications.

“Permitted Acquisitions” means the acquisition by Borrower or any of its Subsidiaries of all or substantially all of the assets of another Person or a division or line of business of another Person, all or substantially all of the capital stock of another Person or a merger, consolidation or other combination with another Person, provided that each of the following shall be applicable to any such acquisition: (a) no Event of Default shall have occurred and be continuing or would result from the consummation of such acquisition; (b) the assets acquired in such acquisition are used or useful in the same or similar line of business as Borrower and its Subsidiaries is in as of the Closing Date or reasonably related thereto and are free and clear of Liens other than Permitted Liens; (c) if such acquisition is structured as a stock acquisition, then the Person so acquired shall either (i) become a wholly-owned Subsidiary of Borrower and Borrower shall comply, or cause such Subsidiary to be joined as a Borrower pursuant to Section 6.14(a) of this Agreement or (ii) such Person shall be merged with and into Borrower (with Borrower being the surviving entity); (d) Borrower shall provide Bank with written notice of the proposed acquisition at least ten (10) days prior to the anticipated closing date of the proposed acquisition; (e) after giving effect to the consummation of such acquisition on a pro forma basis, Borrower shall (i) have a consolidated cash and cash equivalent balance of at least two times the aggregate outstanding principal amount of the Loans at the time such acquisition is consummated and (ii) be in compliance with the financial covenant set forth in Part 2, Section 8 of the Supplement; (f) such acquisition shall have been approved by the board of directors or other legally governing body of the Person selling such assets, and (g) the cash consideration for all such acquisitions shall not exceed \$2,500,000 per year, including without limitation any cash consideration given in connection with earnouts, deferred purchase price obligations, purchase price adjustments, seller notes and similar obligations incurred in connection with such acquisitions. Notwithstanding the foregoing, the potential transaction described on Exhibit A hereto shall be a Permitted Acquisition.

“Permitted Lien” means:

(a) involuntary Liens which, in the aggregate, would not have a Material Adverse Effect and which in any event would not exceed, in the aggregate, the Threshold Amount;

30

(b) Liens for current taxes or other governmental or regulatory assessments which are not delinquent, or which are contested in good faith by the appropriate procedures and for which appropriate reserves are maintained;

(c) security interests on any property held or acquired by Borrower in the ordinary course of business securing Indebtedness incurred or assumed for the purpose of financing all or any part of the cost of acquiring such property; provided, that such Lien attaches solely to the property acquired with such Indebtedness and that the principal amount of such Indebtedness does not exceed one hundred percent (100%) of the cost of such property;

(d) Liens in favor of Agent;

(e) bankers’ liens, rights of setoff and similar Liens incurred on deposits made in the ordinary course of business as long as an account control agreement (or equivalent) for each account in which such deposits are held in a form acceptable to Agent has been executed and delivered to Agent to the extent required under Section 6.11;

(f) materialmen’s, mechanics’, repairmen’s, warehousemen’s, carriers’, landlord’s (subject to Section 5.9(e) hereof), employees’ or other like Liens arising in the ordinary course of business and which are not delinquent for more than forty-five (45) days or are being contested in good faith by appropriate proceedings;

(g) any judgment, attachment or similar Lien, unless the judgment it secures exceeds the Threshold Amount (excluding amounts covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) and has not been discharged or execution thereof effectively stayed and bonded against pending appeal within 30 days of the entry thereof;

(h) licenses or sublicenses of Intellectual Property in accordance with the terms of Section 6.5 hereof;

(i) Liens securing Subordinated Debt;

(j) Liens which have been approved by Lenders in writing prior to the Closing Date, as shown on Schedule 6.2 hereto, including any Liens incurred with the extension, renewal, or refinancing of any Indebtedness secured by Liens referenced on Schedule 6.2 hereto (to the extent permitted under Section 6.1(m));

(k) the interests of licensors under inbound licenses to Borrower;

(l) the interests of sub-lessees under subleases of real property;

(m) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(n) deposits to secure the performance of bids, trade contracts (other than for Indebtedness), leases (other than capital lease obligations), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature arising as a matter of law and incurred in the ordinary course of business;

(o) zoning restrictions, easements, rights of way, restrictions on use of real property and other similar encumbrances incurred in the ordinary course of business which, in the aggregate, are not substantial in amount and do not materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of Borrower or any of its Subsidiaries; and

(p) Liens on cash and cash equivalents securing reimbursement obligations for letters of credit not exceeding \$250,000 at any time.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, public benefit corporation, other entity or government (whether federal, state, county, city, municipal, local, foreign, or otherwise, including any instrumentality, division, agency, body or department thereof).

31

"Proceeds" means "proceeds," as such term is defined in the UCC and, in any event, shall include, without limitation, (a) any and all Accounts, Chattel Paper, Instruments, cash or other forms of money or currency or other proceeds payable to Borrower from time to time in respect of the Collateral, (b) any and all proceeds of any insurance, indemnity, warranty or guaranty payable to Borrower from time to time with respect to any of the Collateral, (c) any and all payments (in any form whatsoever) made or due and payable to Borrower from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any governmental authority (or any Person acting under color of governmental authority), (d) any claim of Borrower against third parties (i) for past, present or future infringement of any Copyright, Patent or Patent License or (ii) for past, present or future infringement or dilution of any Trademark or Trademark License or for injury to the goodwill associated with any Trademark, Trademark registration or Trademark licensed under any Trademark License and (e) any and all other amounts from time to time paid or payable under or in connection with any of the Collateral.

"Receivables" means all of Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, and letters of credit and Letter-of-Credit Rights.

"Records" means all Borrower's computer programs, software, hardware, source codes and data processing information, all written documents, books, invoices, ledger sheets, financial information and statements, and all other writings concerning Borrower's business.

"Related Person" means any Affiliate of Borrower, or any officer, employee, manager, director or equity security holder of Borrower or any Affiliate.

"Required Lenders" (and each a **"Required Lender"**) means, as of any date of determination, Lenders holding at least 51% of the outstanding principal balance of the total principal amount of Loans then outstanding.

"Rights to Payment" means all Borrower's accounts, instruments, contract rights, documents, chattel paper and all other rights to payment, including, without limitation, the Accounts, all negotiable certificates of deposit and all rights to payment under any Patent License, any Trademark License, or any commercial or standby letter of credit.

"Security Documents" means this Agreement, the Supplement hereto, the Intellectual Property Security Agreement, and any and all account control agreements, collateral assignments, chattel mortgages, financing statements, amendments to any of the foregoing and other documents from time to time executed or filed to create, perfect or maintain the perfection of Agent's Liens on the Collateral.

"Shares" means: (a) one hundred percent (100%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by Borrower in any Subsidiary that is not a controlled foreign corporation (as defined in the Internal Revenue Code), and (b) 65% of the issued and outstanding capital stock, membership units or other securities entitled to vote owned or held of record by Borrower in any Subsidiary that is a controlled foreign corporation (as defined in the Internal Revenue Code).

"Subordinated Debt" means Indebtedness (i) approved by Required Lenders; and (ii) where the holder's right to payment of such Indebtedness, the priority of any Lien securing the same, and the rights of the holder thereof to enforce remedies against Borrower following default have been made subordinate to the Liens of Agent (if such Indebtedness is secured) and to the prior payment to each Lender of the Obligations, either (A) pursuant to a written subordination agreement approved by Required Lenders in their sole but reasonable discretion or (B) on terms otherwise approved by Required Lenders in their sole but reasonable discretion.

"Subsidiary" means any Person a majority of the equity ownership or voting stock of which is directly or indirectly now owned or hereafter acquired by Borrower or by one or more other Subsidiaries.

"Supplement" means that certain supplement to the Loan and Security Agreement, dated as of the Closing Date, as the same may be amended or restated from time to time, and any other supplements entered into between Borrower and each Lender, as the same may be amended or restated from time to time.

32

"Supporting Obligations" means any "supporting obligations," as such term is defined in the UCC, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Termination Date" has the meaning specified in the Supplement.

"Threshold Amount" has the meaning specified in the Supplement.

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

“**Trademarks**” means all of the following property now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest: (a) all trademarks, tradenames, corporate names, business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and any applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof and (b) reissues, extensions or renewals thereof.

“**UCC**” means the Uniform Commercial Code as the same may, from time to time, be in effect in the State of New York; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent’s Lien on any Collateral is governed by the Uniform Commercial Code as enacted and in effect in a jurisdiction other than the State of New York, the term “UCC” shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions. Unless otherwise defined herein, terms that are defined in the UCC and used herein shall have the meanings given to them in the UCC.

“**Warrant**” has the meaning specified in the Supplement.

[Signature page follows]

[Signature pages to Loan and Security Agreement]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

BORROWER:

ABEONA THERAPEUTICS INC.

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Chief Financial Officer

MACROCHEM CORPORATION

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Treasurer

ABEONA THERAPEUTICS LLC

By: /s/ Joseph Vazzano
Name: Joseph Vazzano
Title: Treasurer

LENDERS:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: /s/ Sonia Gardner
Name: Sonia Gardner
Title: Member

AVENUE VENTURE OPPORTUNITIES FUND II, L.P.

By: Avenue Venture Opportunities Partners II, LLC
Its: General Partner

By: /s/ Sonia Gardner
Name: Sonia Gardner
Title: Member

AGENT:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: /s/ Sonia Gardner
Name: Sonia Gardner
Title: Member

[Schedules to Loan and Security Agreement follow]

Schedules to
Loan and Security Agreement
dated as of January 8, 2024
between
Abeona Therapeutics Inc., MacroChem Corporation and Abeona Therapeutics LLC
and
Avenue Venture Opportunities Fund, L.P.
and
Avenue Venture Opportunities Fund II, L.P.

Schedule of Exceptions

None.

Schedule 6.1. Permitted Indebtedness

<u>L/C Number</u>	<u>L/C Issuer</u>	<u>Issuance Date</u>	<u>Expiration Date</u>	<u>Letter of Credit Amount</u>	<u>Beneficiary</u>	<u>Applicant</u>
IS000312476U	Wells Fargo Bank, N.A.	September 13, 2022	September 30, 2025	\$338,000	Royal 1330 LLC 825 Northern Blvd. 1 st Fl Great Neck, New York 11021	Abeona Therapeutics Inc.

Schedule 6.2. Permitted Liens

1. Specific asset lien granted by Company to Thermo Fisher Financial Services
2. Specific asset lien granted by Company to Corporation Service Company as representative of Leica Microsystems Financial Services

Schedule 6.6. Permitted Investments

None.

SUPPLEMENT
to the
Loan and Security Agreement
dated as of January 8, 2024
among

Abeona Therapeutics Inc. (“Company”), MacroChem Corporation and Abeona Therapeutics LLC (together with Company, each, individually, a “Borrower”, and collectively, “Borrower”)

Avenue Venture Opportunities Fund, L.P. II, L.P., a Delaware limited partnership (“Avenue 2”), as a lender

and

Avenue Venture Opportunities Fund, L.P., a Delaware limited partnership (“Avenue” and, in its capacity as a lender, together with Avenue 2, each a “Lender” and collectively, “Lenders,” and in its capacity as administrative agent and collateral agent, “Agent”)

This is a Supplement identified in the document entitled Loan and Security Agreement, dated as of January 8, 2024 (as amended, restated, supplemented and modified from time to time, the **“Loan and Security Agreement”**), by and among Borrower, Lenders and Agent. All capitalized terms used in this Supplement and not otherwise defined in this Supplement have the meanings ascribed to them in Article 11 of the Loan and Security Agreement, which is incorporated in its entirety into this Supplement. In the event of any inconsistency between the provisions of the Loan and Security Agreement and this Supplement, this Supplement is controlling.

In addition to the provisions of the Loan and Security Agreement, the parties agree as follows:

Part 1 - Additional Definitions:

“Amortization Period” means the period commencing on the first day of the first full calendar month following the Interest-only Period and continuing until the Maturity Date.

“Commitment” means, subject to the terms and conditions set forth in the Loan and Security Agreement and this Supplement, Lenders’ commitment to make Growth Capital Loans to Borrower up to the aggregate original principal amount of Thirty Million Dollars (\$30,000,000). At the request of Borrower, Lenders may make additional Growth Capital Loans to Borrower of up to an additional Twenty Million Dollars (\$20,000,000) (the **“Discretionary Tranche 3 Additional Availability Amount”**), to be funded between March 31, 2025 and March 31, 2026, as Borrower and Lenders may mutually agree, subject to Borrower’s Revenue traction, compliance with the covenants set forth in Part 2, Section 8 below, and approval of Lenders’ Investment Committees, in their sole discretion, provided that, as of the Closing Date, the Discretionary Tranche 3 Additional Availability Amount shall not be considered, and is not, committed hereunder by any Lender and there shall be no fees associated with the Discretionary Tranche 3 Additional Availability Amount until mutually agreed between Borrower and Lender. Notwithstanding the above, as to any Lender, the obligation of such Lender to make Growth Capital Loans subject to the terms and conditions set forth in the Loan and Security Agreement and this Supplement shall not exceed the amounts set forth under the headings Tranche 1 Commitment and Tranche 2 Commitment (as applicable), opposite such Lender’s name on Schedule 1 to this Supplement.

“Designated Rate” means, for each Growth Capital Loan, a variable rate of interest per annum equal to the greater of (i) the sum of five percent (5.00%) plus the Prime Rate, and (ii) thirteen and one-half percent (13.50%). Changes to the Designated Rate based on changes to the Prime Rate shall be effective as of the next scheduled interest payment date immediately following such change.

“Final Payment” means a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) equal to five percent (5.00%) of the aggregate Growth Capital Loans funded.

“Growth Capital Loan” means any Loan requested by Borrower and funded by a Lender under its Commitment for general corporate purposes of Borrower.

“Interest-only Milestone A” means Borrower has achieved the Tranche 2 Milestone.

“Interest-only Milestone B” means Borrower has achieved, subsequent to the achievement of Interest-only Milestone A, an aggregate amount of at least Ninety Million Dollars (\$90,000,000.00) of cumulative equity and/or non-dilutive capital subsequent to the Closing Date, subject to written evidence of the same, in form and content reasonably acceptable to Lenders.

“Interest-only Period” means the period commencing on the Funding Date and continuing until the fifteenth (15th) month anniversary of the Closing Date; provided, however, that such period shall be extended for nine (9) months if as of the last day of the Interest-only Period then in effect, Borrower has achieved Interest-only Milestone A; provided, further, that such period shall be extended for an additional six (6) months if as of the last day of the Interest-only Period then in effect, Borrower has achieved Interest-only Milestone B; *provided, further*, however, that the Interest-only Period shall not exceed thirty (30) months.

“Loan” or **“Loans”** mean, as the context may require, individually a Growth Capital Loan, and collectively, the Growth Capital Loans.

“Loan Commencement Date” means, with respect to each Growth Capital Loan: (a) the first day of the first full calendar month following the Borrowing Date of such Loan if such Borrowing Date is not the first day of a month; or (b) the same day as the Borrowing Date if the Borrowing Date is the first day of a month.

“Maturity Date” means July 1, 2027.

“Prepayment Fee” means, with respect to any prepayment of the Loans:

(i) if the prepayment occurs during the period commencing on the Closing Date and ending on (but including) the first anniversary of the Closing Date, an amount equal to the principal amount of such Loans prepaid multiplied by three percent (3.00%); and

(ii) if the prepayment occurs during the period commencing on the day after the first anniversary of Closing Date and ending on (but including) the second anniversary of the Closing Date, an amount equal to the principal amount of such Loans prepaid multiplied by two percent (2.00%); and

(iii) if the prepayment occurs during the period commencing on the day after the second anniversary of the Closing date and ending on (but excluding) the Maturity Date, an amount equal to the principal amount of the Loans prepaid multiplied by one percent (1.00%).

“Primary Operating Account” shall be the bank account set forth in Section 6 below, unless and until such account is changed in accordance with Section 5.10 of the Loan and Security Agreement.

“**Prime Rate**” is the rate of interest per annum from time to time published in the Money Rates Section of the print edition of The Wall Street Journal or any successor publication thereto as the “prime rate” then in effect; provided that, in the event such rate of interest is less than zero, such rate shall be deemed to be zero for purposes of this Supplement; and provided further that if such rate of interest, as set forth from time to time in the Money Rates Section of the print edition of The Wall Street Journal, becomes unavailable for any reason as determined by Agent, the “Prime Rate” shall mean the rate of interest per annum announced by JPMorgan Bank, N.A. as its prime rate in effect at its principal office in the State of New York (such announced Prime Rate not being intended to be the lowest rate of interest charged by such institution in connection with extensions of credit to debtors); provided that, in the event such rate of interest is less than zero, such rate shall be deemed to be zero for purposes of this Supplement.

“**Revenue**” means revenue, determined in accordance with GAAP.

2

“**Termination Date**” means the earlier of: (i) the date Lenders may terminate making Growth Capital Loans or extending other credit pursuant to the rights of Lenders under Article 7 of the Loan and Security Agreement; and (ii) the last day of the Interest-only Period.

“**Threshold Amount**” means Two Hundred Fifty Thousand Dollars (\$250,000.00).

“**Tranche 1 Commitment**” means, as to any Lender, subject to the terms and conditions set forth in the Loan and Security Agreement and this Supplement, the obligation of such Lender, if any, to make Tranche 1 Growth Capital Loans to Borrower on the Funding Date in a principal amount not to exceed the amount set forth under the heading Tranche 1 Commitment opposite such Lender’s name on Schedule 1 hereto.

“**Tranche 2**” means the Growth Capital Loans funded beginning on the Tranche 2 Start Date and ending on the Tranche 2 End Date in the aggregate amount of up to Ten Million Dollars (\$10,000,000).

“**Tranche 2 Commitment**” means, as to any Lender, subject to completion of the terms and conditions set forth in the Loan and Security Agreement and this Supplement, the obligation of such Lender, if any, to make Tranche 2 Growth Capital Loans to Borrower beginning on the Tranche 2 Start Date to be funded on or before the Tranche 2 End Date, pursuant to Section 1(b) of Part 2 in a principal amount not to exceed the amount set forth under the heading Tranche 2 opposite such Lender’s name on Schedule 1 hereto.

“**Tranche 2 End Date**” means September 30, 2024.

“**Tranche 2 Milestone**” means Borrower has obtained FDA approval of pz-cel in recessive dystrophic epidermolysis bullosa, with the issuance of a Priority Review Voucher, subject to written evidence of the same, in form and content reasonably acceptable to Lender.

“**Tranche 2 Start Date**” means June 30, 2024, but subject to Borrower’s achievement of the Tranche 2 Milestone.

“**Warrant**” is defined in Part 2, Section 3(a) hereof.

Part 2 - Additional Covenants and Conditions:

1. Growth Capital Loan Facility. Subject to satisfaction of the conditions precedent specified in Sections 4.1 and Section 4.2 of the Loan and Security Agreement and this Supplement, each Lender agrees to make Growth Capital Loans to Borrower under Lenders’ Commitment from time to time from and after the Funding Date up to and including the Termination Date in an aggregate, original principal amount up to, but not exceeding, then then-unfunded portion of Lenders’ Commitment, as follows:

(a) **Tranche 1.** Each Lender shall fund its pro rata share of the Tranche 1 Commitment in the aggregate amount of Twenty Million Dollars (\$20,000,000) on the Funding Date.

(b) **Tranche 2.** Each Lender shall fund its pro rata share of the Tranche 2 Commitment in the aggregate amount of Ten Million Dollars (\$10,000,000) upon Borrower’s request for a Tranche 2 Loan during the period commencing on the Tranche 2 Start Date and ending on the Tranche 2 End Date in an amount up to, but not exceeding, the then-unfunded portion of Lender’s Tranche 2 Commitment

(c) **Minimum Funding Amount; Maximum Number of Borrowing Requests.** Growth Capital Loans requested by Borrower to be made on a single Business Day shall be for a minimum aggregate, original principal amount of One Million Dollars (\$1,000,000.00); provided, however, that the initial Growth Capital Loan shall be funded on the Funding Date in a minimum original principal amount of Twenty Million Dollars (\$20,000,000.00). Borrower shall not submit a Borrowing Request more frequently than once per calendar month;

3

(d) **Repayment of Growth Capital Loans.** Principal of, and interest on, each Growth Capital Loan shall be payable as set forth in a Note evidencing such Growth Capital Loan (substantially in the form attached hereto as Exhibit “A”), which Note shall provide substantially as follows: principal shall be fully amortized over the Amortization Period in equal, monthly principal installments plus, in each case, unpaid interest thereon at the Designated Rate, commencing after the Interest-only Period of interest-only installments at the Designated Rate. In particular, on the Borrowing Date applicable to such Growth Capital Loan, Borrower shall pay to Agent (i) if the Borrowing Date is earlier than the Loan Commencement Date, interest only at the Designated Rate, in advance, on the outstanding principal balance of the Growth Capital Loan for the period from the Borrowing Date through the last day of the calendar month in which such Borrowing Date occurs (it being understood that this clause (i) shall not apply in the case the Borrowing Date is on the same date as the Loan Commencement Date), and (ii) the first (1st) interest-only installment at the Designated Rate, in advance, on the outstanding principal balance of the Note evidencing such Loan for the ensuing month. Commencing on the first day of the second full month after the Borrowing Date and continuing on the first day of each month during the Interest-only Period thereafter, Borrower shall pay to Agent interest only at the Designated Rate, in advance, on the outstanding principal balance of the Loan evidenced by such Note for the ensuing month. Commencing on the first day of the first full month after the end of the Interest-only Period, and continuing on the first day of each consecutive calendar month thereafter, Borrower shall pay to Agent equal consecutive monthly principal installments in advance in an amount sufficient to fully amortize the Loan evidenced by such Note over the Amortization Period, plus interest at the Designated Rate for such month. On the Maturity Date, all principal and accrued interest then remaining unpaid and the Final Payment shall be due and payable.

2. Prepayment. The Growth Capital Loans may be prepaid as provided in this Section 2 only. Borrower may prepay all, but not less than all, outstanding Growth Capital Loans in whole, but not in part, at any time upon no less than five (5) Business Days’ prior written notice to Lenders, by tendering to each Lender a cash payment in respect of such Loans in an amount determined by such Lender equal to the sum of: (i) the aggregate outstanding principal amount of such Loans; (ii) the accrued and unpaid interest on such Loans as of the date of prepayment; (iii) the Prepayment Fee; and (iv) the Final Payment; provided that, if a Lender has not yet exercised its rights under Section 3(d) hereof, Borrower shall provide written notice of prepayment at least ten (10) days in advance of the proposed prepayment date and such Lender shall have the option, with respect to the Conversion Option, to exercise its rights pursuant to Section 3(d) hereof by delivering written notice to Borrower at least two (2) Business Days in advance of the proposed prepayment date.

3. Issuance of Warrant; Right to Invest; Conversion Right.

(a) **Warrant.** As additional consideration for the making of the Commitment, each Lender has earned and is entitled to receive immediately upon the execution of the Loan and Security Agreement and this Supplement, a warrant instrument issued by Borrower (the “**Warrant**”).

(b) **Warrant General.** The Warrant shall be in form and substance reasonably satisfactory to the applicable Lender.

(c) **Right to Invest.** Lenders shall, subject to compliance with applicable securities laws, have the right, in their discretion, but not the obligation, to invest up to an aggregate of One Million Dollars (\$1,000,000.00) in equity securities of Borrower on the same terms, conditions, and pricing offered by Borrower to any investor existing at such time, in connection with any offering of Borrower’s equity securities, including in connection with a private placement concurrent with any direct listing of Borrower’s equity securities (at the direct listing price); provided, however, such terms shall exclude a seat on Borrower’s Board of Directors, which may be offered to other investors at Borrower’s discretion. Lenders may allocate the One Million Dollar investment opportunity between themselves in their sole discretion. Notwithstanding the foregoing, each Lender’s right to invest as set forth in this clause (c) shall automatically terminate on the Maturity Date (or such earlier date that the Commitments have terminated and the Obligations are repaid in full (other than inchoate indemnity obligations)).

4

(d) **Conversion Right.** Lenders shall have the right, in their discretion, but not the obligation, at any time and from time to time, while the Loan is outstanding, to convert an amount of up to Three Million Dollars (\$3,000,000.00) of the principal amount of the outstanding Growth Capital Loans (the “**Conversion Option**”) into Warrant Stock (as defined in the Warrant) at a price per share equal to one hundred twenty percent (120.00%) of the Exercise Price set forth (and as defined) in the Warrant (the “**Conversion Price**,” the exercise of such Conversion Option, a “**Conversion**”). The Conversion Option will be exercised by such Lender delivering a written, signed conversion notice to Borrower in accordance with this Section 3(d), which will include (i) the date of which the conversion notice is given, (ii) a statement to the effect that the applicable Lender is exercising the Conversion Option, (iii) the amount in respect of which the Conversion Option is being exercised and the number of shares issued and (iv) a date on which the allotment and issuance of the shares is to take place. In the event Borrower elect to prepay the Loans in full, Lenders shall have ten (10) days to elect to exercise their Conversion Options prior to such prepayment. Notwithstanding the above, the Conversion Option shall terminate upon payment in full of the Loans.

4. Commitment Fee. Borrower shall pay to each Lender, pro-rata in accordance with each Lender’s respective Commitment, a commitment fee in the amount of one percent (1.00%) of the Thirty Million Dollars (\$30,000,000.00) in total Commitment due and payable on the Funding Date, of which One Hundred Fifty Thousand Dollars (\$150,000.00) has been paid by Borrower to Agent as an advance deposit prior to the date hereof.

5. Documentation Fee Payment On the Funding Date, Borrower shall reimburse each Lender and Agent pursuant to Section 9.8(a) of the Loan and Security Agreement for (i) its reasonable attorneys’ fees, costs and expenses incurred in connection with the preparation and negotiation of the Loan Documents (provided that so long as there are not more than two turns of the Loan Documents, such costs shall be capped at \$100,000) and (ii) such Lender’s and Agent’s costs and filing fees related to perfection of its Liens in the Collateral in any jurisdiction in which the same is located, recording a copy of the Intellectual Property Security Agreement with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, and confirming the priority of such Liens.

6. Borrower’s Primary Operating Account and Wire Transfer Instructions:

Institution Name:
Address:
ABA No.:
Contact Name:
Phone No.:
E-mail:
Account Title:
Account No.:

7. Debits to Account for ACH Transfers. For purposes of Sections 2.2 and 5.10 of the Loan and Security Agreement, the Primary Operating Account shall be the bank account set forth in Section 6 above, unless and until such account is changed in accordance with Section 5.10 of the Loan and Security Agreement. Borrower hereby agrees that the Growth Capital Loans will be advanced to the account specified above and regularly scheduled payments of principal, interest and fees due to each Lender will be automatically debited by each Lender from the same account. Borrower hereby confirms that the bank at which the Primary Operating Account is maintained uses that same ABA Number for incoming wires transfers to the Primary Operating Account and outgoing ACH transfers from the Primary Operating Account.

8. Financial Covenant. Borrower at all times shall comply with the following financial covenant:

(a) **Minimum Unrestricted Cash.** Commencing on the Closing Date, Borrower shall at all times maintain at least Five Million Dollars (\$5,000,000) in unrestricted cash held in Deposit Accounts located in the United States as to which an account control agreement has been executed and delivered to Agent, tested monthly.

5

9. Post-Closing Covenants. Borrower shall use commercially reasonable efforts to deliver to Agent the following items:

(a) On or before the sixtieth (60th) day after the Closing Date, a Waiver (in accordance with Section 5.9(e) of the Agreement) from the owner, operator, landlord or other Person in possession of tangible Collateral at 6555 Carnegie Avenue, Floor 4, Cleveland, OH 44103.

(b) On or before the Funding Date, the following fully executed account control agreements:

- (i) a deposit account control agreement covering its Deposit Accounts held with Wells Fargo Bank;
- (ii) a securities account control agreement covering its investment account held with Wells Fargo Bank;
- (iii) a securities account control agreement covering its investment accounts held with Merrill Lynch;

(c) On or before the thirtieth (30th) day after the Closing Date, copies of Borrower’s insurance policies and endorsements thereto showing Agent as a loss payee or additional insured.

(d) On or before the thirtieth (30th) day after the Closing Date, evidence of Borrower’s qualification in the State of New York, together with a good standing certificate.

Part 3 - Additional Representations:

Borrower represents and warrants that as of the Closing Date and, subject to any written updates of the information set forth below by Borrower to each Lender and Agent, each

Borrowing Date:

a) Its chief executive office is located at:

<u>Borrower</u>	<u>Address</u>
Abeona Therapeutics Inc.	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
MacroChem Corporation	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
Abeona Therapeutics LLC	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103

b) Its Equipment is located at:

<u>Borrower</u>	<u>Address</u>
Abeona Therapeutics Inc.	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
MacroChem Corporation	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
Abeona Therapeutics LLC	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103

c) Its Inventory is located at:

<u>Borrower</u>	<u>Address</u>
Abeona Therapeutics Inc.	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
MacroChem Corporation	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
Abeona Therapeutics LLC	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103

6

d) Its Records are located at:

<u>Borrower</u>	<u>Address</u>
Abeona Therapeutics Inc.	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
MacroChem Corporation	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103
Abeona Therapeutics LLC	6555 Carnegie Avenue – Floor 4, Cleveland, OH 44103

e) In addition to its chief executive office, Borrower maintains offices or operates its business at the following locations:

<u>Borrower</u>	<u>Address</u>
Abeona Therapeutics Inc.	1330 Avenue of the Americas, 33Rd Floor, New York, New York 10019
MacroChem Corporation	1330 Avenue of the Americas, 33Rd Floor, New York, New York 10019
Abeona Therapeutics LLC	1330 Avenue of the Americas, 33Rd Floor, New York, New York 10019

f) Other than its full corporate name, Borrower has conducted business using the following trade names or fictitious business names:

<u>Borrower</u>	<u>Other Names</u>
Abeona Therapeutics Inc.	N/A
MacroChem Corporation	N/A
Abeona Therapeutics LLC	N/A

g) Its state corporation identification number is:

<u>Borrower</u>	<u>State Corporation Identification Number</u>
Abeona Therapeutics Inc.	
MacroChem Corporation	
Abeona Therapeutics LLC	

h) Its U.S. federal tax identification number is:

<u>Borrower</u>	<u>Fed. Employer ID No.</u>
Abeona Therapeutics Inc.	
MacroChem Corporation	
Abeona Therapeutics LLC	

7

i) Including Borrower’s Primary Operating Account identified in Section 6 above, Borrower maintains the following Deposit Accounts and investment accounts:

<u>Borrower</u>	<u>Bank Name</u>	<u>Account Number</u>	<u>Branch Address</u>	<u>Purpose of Account</u>	<u>Average Balance</u>

Part 4 - Additional Loan Documents:

[Remainder of this page intentionally left blank; signature page follows]

8

[Signature page to Supplement to Loan and Security Agreement]

IN WITNESS WHEREOF, the parties have executed this Supplement as of the date first above written.

BORROWER:

ABEONA THERAPEUTICS INC.

By: /s/ Joseph Vazzano

Name: Joseph Vazzano

Title: Chief Financial Officer

Address for Notices:

6555 Carnegie Avenue, Floor 4
Cleveland, OH 44103
Attn: Joseph Vazzano
Email: jvazzano@abeonatherapeutics.com
Phone # 908-625-9541

MACROCHEM CORPORATION

By: /s/ Joseph Vazzano

Name: Joseph Vazzano

Title: Treasurer

Address for Notices:

6555 Carnegie Avenue, Floor 4
Cleveland, OH 44103
Attn: Joseph Vazzano
Email: jvazzano@abeonatherapeutics.com
Phone # 908-625-9541

ABEONA THERAPEUTICS LLC.

By: /s/ Joseph Vazzano

Name: Joseph Vazzano

Title: Treasurer

Address for Notices:

6555 Carnegie Avenue, Floor 4
Cleveland, OH 44103
Attn: Joseph Vazzano
Email: jvazzano@abeonatherapeutics.com
Phone # 908-625-9541

[Signature page to Supplement to Loan and Security Agreement—continued]

AGENT:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: /s/ Sonia Gardner

Name: Sonia Gardner

Title: Member

Address for Notices:

11 West 42nd Street, 9th Floor
New York, New York 10036
Attn: Todd Greenbarg, Senior Managing Director
Email: tgreenbarg@avenuecapital.com
Phone: 212-878-3523

LENDERS:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: /s/ Sonia Gardner

Name: Sonia Gardner

Title: Member

Address for Notices:

11 West 42nd Street, 9th Floor
New York, New York 10036
Attn: Todd Greenberg, Senior Managing Director
Email: tgreenberg@avenuecapital.com
Phone: 212-878-3523

AVENUE VENTURE OPPORTUNITIES FUND II, L.P.

By: Avenue Venture Opportunities Partners II, LLC
Its: General Partner

By: /s/ Sonia Gardner

Name: Sonia Gardner

Title: Member

Address for Notices:

11 West 42nd Street, 9th Floor
New York, New York 10036
Attn: Todd Greenberg, Senior Managing Director
Email: tgreenberg@avenuecapital.com
Phone: 212-878-3523

EXHIBIT "A"

FORM OF PROMISSORY NOTE

[Note No. XXXX]

\$ _____

[_____] , 20__

The undersigned ("Borrower") promises to pay to the order of _____ ("Lender"), at such place as Lender may designate in writing, in lawful money of the United States of America, the principal sum of _____ Dollars (\$ _____), with interest thereon from the date hereof until maturity, whether scheduled or accelerated, at a variable rate per annum equal to the sum of to the greater of (i) the sum of five percent (5.0%) plus the Prime Rate, and (ii) thirteen and one-half percent (13.50%) (the "Designated Rate"), according to the payment schedule described herein, except as otherwise provided herein. In addition, on the Maturity Date, Borrower promises to pay to the order of Lender (i) all principal and accrued interest then remaining unpaid and (ii) the Final Payment (as defined in the Supplement to the Loan Agreement (as defined herein)).

This Note is one of the Notes referred to in, and is entitled to all the benefits of, a Loan and Security Agreement, dated as of January 8, 2024, among Borrower, Lender, the other lender party thereto and Agent (as the same may be amended, restated or supplemented from time to time, the "Loan Agreement"). Each capitalized term not otherwise defined herein shall have the meaning set forth in the Loan Agreement. The Loan Agreement contains provisions for the acceleration of the maturity of this Note upon the happening of certain stated events.

Principal of and interest on this Note shall be payable as provided under Section 1(d) of Part 2 of the Supplement to the Loan Agreement.

This Note may be prepaid only as permitted under Section 2 of Part 2 of the Supplement to the Loan Agreement.

Any unpaid payments of principal or interest on this Note shall bear interest from their respective maturities, whether scheduled or accelerated, at a rate per annum equal to the Default Rate, compounded monthly. Borrower shall pay such interest on demand.

Interest, charges and fees shall be calculated for actual days elapsed on the basis of a 360 -day year, which results in higher interest, charge or fee payments than if a 365-day year were used. In no event shall Borrower be obligated to pay interest, charges or fees at a rate in excess of the highest rate permitted by applicable law from time to time in effect.

If Borrower is late in making any scheduled payment under this Note by more than five (5) days, Borrower agrees to pay a "late charge" of five percent (5%) of the installment due, but not less than fifty dollars (\$50) for any one such delinquent payment. This late charge may be charged by Lender for the purpose of defraying the expenses incidental to the handling of such delinquent amounts. Borrower acknowledges that such late charge represents a reasonable sum considering all of the circumstances existing on the date of this Note and represents a fair and reasonable estimate of the costs that will be sustained by Lender due to the failure of Borrower to make timely payments. Borrower further agrees that proof of actual damages would be costly and inconvenient. Such late charge shall be paid without prejudice to the right of Lender to collect any other amounts provided to be paid or to declare a default under this Note or any of the other Loan Documents or from exercising any other rights and remedies of Lender.

[Signature page to Promissory Note]

This Note shall be governed by, and construed in accordance with, the laws of the State of New York, excluding those laws that direct the application of the laws of another jurisdiction.

Borrower's execution and delivery of this Note via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., www.docusign.com) shall constitute effective execution and delivery of this Note and agreement to and acceptance of the terms hereof for all purposes. The fact that this Note is executed, signed, stored or delivered electronically shall not prevent the assignment or transfer by Lender of this Note pursuant to the terms of the Loan Agreement or the enforcement of the terms hereof. Physical possession of the original of this Note or any paper copy thereof shall confer no special status to the bearer thereof. In no event shall an original ink-signed paper copy of this Note be required for any exercise of Lender's rights hereunder.

[ABEONA THERAPEUTICS INC.]
[MACROCHEM CORPORATION]
[ABEONA THERAPEUTICS LLC]

By: _____

Name: _____

Its:

EXHIBIT "B"

FORM OF BORROWING REQUEST

[], 202__

Avenue Venture Opportunities Fund, L.P.
11 West 42nd Street, 9th Floor
New York, New York 10036

Avenue Venture Opportunities Fund II, L.P.
11 West 42nd Street, 9th Floor
New York, New York 10036

Re: ABEONA THERAPEUTICS INC.

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement, dated as of January 8, 2024 (as amended, restated or supplemented from time to time, the "Loan Agreement"; the capitalized terms used herein as defined therein), among Avenue Venture Opportunities Fund, L.P. ("Avenue"), as administrative agent and collateral agent (in such capacity, "Agent"), and as a lender, Avenue Venture Opportunities Fund II, L.P. ("Avenue 2" and together with Avenue, in its capacity as a lender, collectively, "Lenders", and each a "Lender"), and Abeona Therapeutics Inc., MacroChem Corporation and Abeona Therapeutics LLC (each, a "Borrower", and collectively, "Borrower"). Abeona Therapeutics Inc. is sometimes referred to herein as "Company."

The undersigned is the _____ of Company and hereby requests on behalf of Borrower a Loan under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Loan is _____ Dollars (\$ _____). The Borrowing Date of the proposed Loan is _____ (the "Borrowing Date").

(a) On the Borrowing Date,

(i) Avenue will wire \$[_____] less fees and expenses to be deducted on the Borrowing Date of (a) [\$_____] in respect to the Commitment Fee, of which \$100,000 has been paid to Avenue prior to the date hereof, (b) \$[_____] in respect to the interest fee, and (c) \$[_____] in respect to the legal fees for net proceeds of \$[_____] , and

(ii) Avenue 2 will wire \$[_____] less fees and expenses to be deducted on the Borrowing Date of (a) [\$_____] in respect to the Commitment Fee, of which [\$_____] has been paid to Avenue 2 prior to the date hereof, (b) \$[_____] in respect to the interest fee, and (c) \$[_____] in respect to the legal fees for net proceeds of \$[_____] .

1

to Borrower pursuant to the following wire instructions:¹

Institution Name:
Address:
ABA No.:
Contact Name:
Phone No.:
E-mail:
Account Title:
Account No.:

(b) On the Borrowing Date, (i) Avenue will wire \$[_____] , and (ii) Avenue 2 will wire \$[_____] to GCA Law Partners LLP for fees and expenses pursuant to the following wire instructions:^[2]

Institution Name:
ABA No.:
Account Title:
Account No.:
Reference:
Confirm remittance:

2. As of this date, no Default or Event of Default has occurred and is continuing, or will result from the making of the proposed Loan, the representations and warranties of Borrower contained in Article 3 of the Loan Agreement and Part 3 of the Supplement are true and correct in all material respects other than those representations and warranties expressly referring to a specific date which are true and correct in all material respects as of such date, and the conditions precedent described in Sections 4.1 and/or 4.2 of the Loan Agreement and Part 2 of the Supplement, as applicable, have been met.

3. No event has occurred that has had or could reasonably be expected to have a Material Adverse Change.

4. Borrower's most recent financial statements, financial projections or business plan dated _____, as reviewed by Borrower's Board of Directors, are enclosed herewith in the event such financial statements, financial projections or business plan have not been previously provided to Agent.

Remainder of this page intentionally left blank; signature page follows

² To be included in the Borrowing Request on the Funding Date. The executed Borrowing Request must be delivered two (2) Business Days prior to the Funding Date.

[Signature page to Borrowing Request]

Borrower shall notify you promptly before the funding of the Loan if any of the matters to which I have certified above shall not be true and correct on the Borrowing Date.

Very truly yours,

[ABEONA THERAPEUTICS INC.]
[MACROCHEM CORPORATION]
[ABEONA THERAPEUTICS LLC]

By: _____
Name: _____
Title: * _____

* Must be executed by Borrower’s Chief Financial Officer or other executive officer.

EXHIBIT “C”

FORM OF COMPLIANCE CERTIFICATE

Avenue Venture Opportunities Fund, L.P.
11 West 42nd Street, 9th Floor
New York, New York 10036

Avenue Venture Opportunities Fund II, L.P.
11 West 42nd Street, 9th Floor
New York, New York 10036

Re: ABEONA THERAPEUTICS INC.

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement, dated as of January 8, 2024 (as may be supplemented, amended and modified from time to time, the Loan Agreement,” the capitalized terms used herein as defined therein), among Avenue Venture Opportunities Fund, L.P. (“Avenue”), as administrative agent and collateral agent (in such capacity, “Agent”), and as a lender, Avenue Venture Opportunities Fund II, L.P. (“Avenue 2” and together with Avenue, acting in its capacity as a lender, collectively, “Lenders”, and each a “Lender”), and Abeona Therapeutics Inc., MacroChem Corporation and Abeona Therapeutics LLC (each, a “Borrower”, and collectively, “Borrower”).

The undersigned authorized representative of Borrower hereby certifies in such capacity that in accordance with the terms and conditions of the Loan Agreement, (i) no Default or Event of Default has occurred and is continuing, except as noted below, and (ii) Borrower is in compliance for the financial reporting period ending _____ with all required financial reporting under the Loan Agreement, except as noted below. Attached herewith are the required documents supporting the foregoing certification. The undersigned authorized representative of Borrower further certifies in such capacity that: (a) the accompanying financial statements have been prepared in accordance with Borrower’s past practices applied on a consistent basis, or in such manner as otherwise disclosed in writing to Agent, throughout the periods indicated; and (b) the financial statements fairly present in all material respects the financial condition and operating results of Borrower and its Subsidiaries, if any, as of the dates, and for the periods, indicated therein, subject to the absence of footnotes and normal year-end audit adjustments (in the case of interim monthly financial statements), except as explained below.

Please provide the following requested information and indicate compliance status by circling (or otherwise indicating) Yes/No under “Included/Complies”:

<u>REPORTING REQUIREMENT</u>	<u>REQUIRED</u>	<u>INCLUDED/COMPLIES</u>
Balance Sheet, Income Statement & Cash Flow Statement	Monthly, within 30 days	YES / NO / N/A
Operating Budgets, 409(A) Valuations & Updated Capitalization Tables	As modified	YES / NO / N/A
Annual Financial Statements	Annually, within 90 days of fiscal year-end	YES / NO / N/A
Board Packages	As modified	YES / NO / N/A

Date of most recent Board-approved

budget/plan _____

Any change in budget/plan since version most recently

delivered to Agent

YES / NO / N/A

If Yes, please attach

Date of most recent capitalization table: _____

Any changes in capitalization table since version most recently delivered to Agent?:

YES / NO / N/A

If Yes, please attach a copy of latest capitalization table

<u>FINANCIAL COVENANT</u>	<u>REQUIRED</u>	<u>ACTUAL</u>	<u>INCLUDED/COMPLIES</u>
Minimum Unrestricted Cash	\$ 5,000,000	\$	YES / NO / N/A

EQUITY & CONVERTIBLE NOTE FINANCINGS

Please provide the following information (if applicable) regarding Borrower's most-recent equity and/or convertible note financing each time this Certificate is delivered to Agent

Date of Last Round Raised: _____

Has there been any new financing since the last Compliance Certificate submitted?

YES / NO

If "YES" please attach a copy of the Capitalization Table

Date Closed: _____ Series: _____ Per Share Price: \$ _____

Amount Raised: _____ Post Money Valuation: _____

Any stock splits since date of last report?

YES / NO

If yes, please provide any information on stock splits which would affect valuation

Any dividends since date of last report?

YES / NO

If yes, please provide any information on dividends which would affect valuation:

Any unusual terms? (i.e., Anti-dilution, multiple preference, etc.)

YES / NO

If yes, please explain:

ACCOUNT CONTROL AGREEMENTS

Pursuant to Section 6.11 of the Loan Agreement, Borrower represents and warrants that: (i) as of the date hereof, it maintains only those deposit and investment accounts set forth below; and (ii) to the extent required by Section 6.11 of the Loan Agreement, a control agreement has been executed and delivered to Agent with respect to each such account [Note: If Borrower has established any new account(s) since the date of the last compliance certificate, please so indicate]

³ Company: Please complete with existing accounts.

Deposit Accounts³

	<u>Name of Institution</u>	<u>Account Number</u>	<u>Control Agt. In place?</u>	<u>Complies</u>	<u>New Account</u>
1.)	[]	[]	YES / NO	YES / NO	YES / NO
2.)	_____	_____	YES / NO	YES / NO	YES / NO

Investment Accounts

	<u>Name of Institution</u>	<u>Account Number</u>	<u>Control Agt. In place?</u>	<u>Complies</u>	<u>New Account</u>
1.)	None	_____	YES / NO	YES / NO	YES / NO
2.)	_____	_____	YES / NO	YES / NO	YES / NO
3.)	_____	_____	YES / NO	YES / NO	YES / NO
4.)	_____	_____	YES / NO	YES / NO	YES / NO

AGREEMENTS WITH PERSONS IN POSSESSION OF TANGIBLE COLLATERAL

Pursuant to Section 5.9(e) of the Loan Agreement, Borrower represents and warrants that: (i) as of the date hereof, tangible Collateral is located at the addresses set forth below; and (ii) to the extent required by Section 5.9(e) of the Loan Agreement, a Waiver has been executed and delivered to Agent, or such Waiver has been waived by Agent, [Note: If Borrower has located Collateral at any new location since the date of the last compliance certificate, please so indicate].

	<u>Location of Collateral</u>	<u>Value of Collateral at such Locations</u>	<u>Waiver In place?</u>	<u>Complies?</u>	<u>New Location?</u>
1.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
2.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
3.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
4.)	_____	\$ _____	YES / NO	YES / NO	YES / NO

SUBSIDIARIES AND OTHER PERSONS

Pursuant to Section 6.14(a) of the Loan Agreement, Borrower represents and warrants that: (i) as of the date hereof, it has directly or indirectly acquired or created, or it intends to directly or indirectly acquire or create, each Subsidiary or other Person described below; and (ii) such Subsidiary or Person has been made a co-borrower under the Loan Agreement or a guarantor of the Obligations *[Note: If Borrower has acquired or created any Subsidiary since the date of the last compliance certificate, please so indicate]*

	<u>Name:</u>	<u>Jurisdiction of formation or organization:⁴</u>	<u>Co-borrower or guarantor?</u>	<u>Complies?</u>	<u>New Subsidiary or Person?</u>
1.)	_____	_____	YES / NO	YES / NO	YES / NO
2.)	_____	_____	YES / NO	YES / NO	YES / NO
3.)	_____	_____	YES / NO	YES / NO	YES / NO
4.)	_____	_____	YES / NO	YES / NO	YES / NO

EXPLANATIONS

[Remainder of this page intentionally left blank; signature page follows]

⁴ Under the "Explanations" heading (see below) please include a description of such Subsidiary's or Person's fully diluted capitalization and Borrower's purpose for its acquisition or creation of such Subsidiary if such information has not been previously furnished to Agent.

[Signature page to Compliance Certificate]

Very truly yours,

ABEONA THERAPEUTICS INC.
 MACROCHEM CORPORATION
 ABEONA THERAPEUTICS LLC

By: _____
 Name: _____
 Title:* _____

* Must be executed by Borrower's Chief Financial Officer or other executive officer.

SCHEDULE 1

LENDER COMMITMENTS

TRANCHE 1 COMMITMENTS

<u>Lenders</u>	<u>Tranche 1 Commitment</u>	<u>Tranche 1 Commitment Percentage</u>
Avenue Venture Opportunities Fund, L.P.	\$ 4,000,000	20%
Avenue Venture Opportunities Fund II, L.P.	\$ 16,000,000	80%
TOTAL COMMITMENTS	\$ 20,000,000	100%

TRANCHE 2 COMMITMENTS

<u>Lenders</u>	<u>Tranche 2 Commitment</u>	<u>Tranche 2 Commitment Percentage</u>
Avenue Venture Opportunities Fund, L.P.	\$ 2,000,000	20%
Avenue Venture Opportunities Fund II, L.P.	\$ 8,000,000	80%
TOTAL COMMITMENTS	\$ 10,000,000	100%



Abeona Therapeutics Announces \$50 Million Credit Facility

CLEVELAND, January 8, 2024 – Abeona Therapeutics Inc. (Nasdaq: ABEO) today announced that it has entered into a \$50 million credit facility with the Avenue Venture Opportunities Fund, L.P. The credit agreement, which has a term of three and a half years, includes a first tranche of \$20 million at closing, a second tranche of \$10 million of committed capital, and an additional accordion option to upsize the credit facility by an additional \$20 million upon satisfaction of certain terms and conditions.

Proceeds from the facility are intended to support the Company’s ongoing preparations for launch and commercialization in anticipation of a potential approval for marketing in the U.S. by the Food and Drug Administration (FDA) of pz-cel (prademagene zamikeracel), Abeona’s investigational autologous, COL7A1 gene-corrected epidermal sheets for the treatment of patients with recessive dystrophic epidermolysis bullosa (RDEB), and for general corporate purposes. The FDA has accepted and granted Priority Review with a PDUFA target action date of May 25, 2024 for the Biologics License Application for pz-cel.

“We are excited to enter into this relationship with Avenue Venture Fund and secure additional financial resources to further support our launch and commercialization efforts for pz-cel,” said Joe Vazzano, Chief Financial Officer of Abeona. “We expect the proceeds from this term loan facility will meaningfully extend Abeona’s cash runway even further beyond value creating milestones, including the potential approval of pz-cel.”

A.G.P./Alliance Global Partners served as financial advisor and sole lead arranger to the Company on this transaction.

About Avenue Venture Opportunities

The Avenue Venture Debt Fund seeks to provide creative financing solutions to high-growth, venture capital-backed technology and life science companies. The Avenue Venture Debt Opportunities Fund focuses generally on companies within the underserved segment of the market created by the widening financing gap between commercial banks and larger debt funds. The Avenue Venture Debt fund is part of the larger group of funds of Avenue Capital Group. For additional information on Avenue Capital Group, which is a global investment firm with assets estimated to be approximately \$12.6 billion as of November 30, 2023, visit www.avenuecapital.com.

About Abeona Therapeutics

Abeona Therapeutics Inc. is a clinical-stage biopharmaceutical company developing cell and gene therapies for serious diseases. The U.S. FDA has accepted and granted Priority Review with a PDUFA target action date of May 25, 2024 for the Biologics License Application for pz-cel (prademagene zamikeracel), Abeona’s investigational autologous, COL7A1 gene-corrected epidermal sheets currently in development for recessive dystrophic epidermolysis bullosa. The Company’s fully integrated cell and gene therapy cGMP manufacturing facility served as the manufacturing site for pz-cel used in its Phase 3 VIITAL™ trial, and is capable of supporting commercial production of pz-cel upon FDA approval. The Company’s development portfolio also features AAV-based gene therapies for ophthalmic diseases with high unmet medical need. Abeona’s novel, next-generation AAV capsids are being evaluated to improve tropism profiles for a variety of devastating diseases. For more information, visit www.abeonatherapeutics.com.

Forward-Looking Statements

This press release contains certain statements that are forward-looking 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, and that involve risks and uncertainties. We have attempted to identify forward-looking statements by such terminology as “may,” “will,” “believe,” “anticipate,” “expect,” “intend,” “potential,” and similar words and expressions (as well as other words or expressions referencing future events, conditions or circumstances), which constitute and are intended to identify forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, numerous risks and uncertainties, including but not limited to, the timing and outcome of our Biologics License Application submission to the FDA for pz-cel; the FDA’s grant of a Priority Review Voucher; continued interest in our rare disease portfolio; our ability to enroll patients in clinical trials; the outcome of future meetings with the FDA or other regulatory agencies, including those relating to preclinical programs; the ability to achieve or obtain necessary regulatory approvals; the impact of any changes in the financial markets and global economic conditions; risks associated with data analysis and reporting; and other risks disclosed in the Company’s most recent Annual Report on Form 10-K and subsequent periodic reports filed with the Securities and Exchange Commission. The Company undertakes no obligation to revise the forward-looking statements or to update them to reflect events or circumstances occurring after the date of this press release, whether as a result of new information, future developments or otherwise, except as required by the federal securities laws.

Investor and Media Contact:

Greg Gin
VP, Investor Relations and Corporate Communications
Abeona Therapeutics
ir@abeonatherapeutics.com
