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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 8-K**

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**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **June 20, 2017**

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**MADRIGAL PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation)

**001-33277**  
(Commission File  
Number)

**04-3508648**  
(IRS Employer  
Identification No.)

**Four Tower Bridge**  
**200 Barr Harbor Drive, Suite 400**  
**West Conshohocken, Pennsylvania**  
(Address of principal executive offices)

**19428**  
(Zip Code)

**(484) 380-9263**  
Registrant's telephone number, including area code

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

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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:

- 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))

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.

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## **Item 1.01 Entry into a Material Definitive Agreement.**

### *Securities Purchase Agreement*

On June 20, 2017, Madrigal Pharmaceuticals, Inc. (the “Company”) entered into a Securities Purchase Agreement (the “Purchase Agreement”) with a group of institutional accredited investors, which are existing, non-controlling stockholders of the Company and are named on the Schedule of Investors to the Purchase Agreement (the “Investors”), pursuant to which the Company will sell securities to the Investors in a private placement transaction (the “Offering”). Under the terms of the Offering, the Company will sell approximately 328,300 shares of its common stock, \$0.0001 par value per share (the “Common Stock”), at a price of \$15.23 per share, and 1.97 million shares of its Series A Convertible Preferred Stock, par value \$0.0001 per share (the “Series A Preferred Stock”), at a price of \$15.23 per share. The Series A Preferred Stock is convertible into shares of the Common Stock (the “Conversion Shares”) at a one-to-one ratio, subject to adjustment as provided in the Purchase Agreement. The Company expects the Offering to result in gross proceeds to the Company of approximately \$35,000,000, before deducting estimated offering expenses payable by the Company. The Offering is expected to close on or about June 23, 2017, subject to customary closing conditions.

The powers, preferences, rights, qualifications, limitations and restrictions applicable to the Series A Preferred Stock are set forth in the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock, that the Company filed with the Secretary of State of the State of Delaware on June 21, 2017. Additional information regarding the Series A Preferred Stock is included under Item 5.03 of this Current Report on Form 8-K and is incorporated into this item by reference.

Pursuant to the Purchase Agreement, the Company agreed to file a registration statement on Form S-3 (the “Registration Statement”) with the Securities and Exchange Commission within 30 days after the closing of the Offering to register the resale of the shares of the Common Stock issued and sold in the Offering. The Company also agreed to use its best efforts to have the Registration Statement declared effective within 90 days after the closing of the Offering.

The securities issued in the Offering have not been registered under the Securities Act of 1933, as amended (the “Securities Act”), and until so registered the securities may not be offered or sold absent registration or availability of an applicable exemption from registration.

This announcement is not an offer to sell securities of the Company, and any opportunity to participate in the Offering was available to a limited group of institutional accredited investors.

### *Registration Rights Agreement*

In connection with the Offering, the Company will be obligated to enter into that certain Affiliate Registration Rights Agreement in the form attached to the Purchase Agreement as Exhibit B (the “Registration Rights Agreement”), in the event that certain of the Investors determine they may be deemed to be “affiliates” of the Company within the meaning of Rule 144 of the Securities Act. Pursuant to the Registration Rights Agreement, following the demand by any investor signatory thereto, the Company will be required to file a registration statement on Form S-3 covering the resale of the shares of the Common Stock and the Conversion Shares purchased in the Offering by such investor within 60 days of such demand.

A copy of the Purchase Agreement, including the form of the Registration Rights Agreement attached as an exhibit thereto, is filed as Exhibit 10.1 to this Current Report on Form 8-K and is incorporated herein by reference. The foregoing description of the Offering and the documentation related thereto does not purport to be complete and is qualified in its entirety by reference to such Exhibit to this Current Report on Form 8-K. The Purchase Agreement has been included to provide investors and security holders with information regarding its terms. It is not intended to provide any other factual information about the Company. The representations, warranties and covenants contained in the Purchase Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties. The representations and warranties have been made for the purposes of allocating contractual risk between the

parties to the Purchase Agreement instead of establishing these matters as facts, and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors.

**Item 3.02 Unregistered Sale of Equity Securities.**

The disclosure set forth in Item 1.01 of this Current Report on Form 8-K is hereby incorporated by reference into this Item 3.02.

The issuance and sale of the securities in the Offering will be made pursuant to an exemption from the registration requirements of the Securities Act provided by Section 4(a)(2) thereof and Regulation D promulgated thereunder. The Offering was conducted without general solicitation or advertising. Each Investor represented to the Company that it is an accredited investor with access to information about the Company sufficient to evaluate the investment and that the securities were being acquired without a view to distribution or resale in violation of the Securities Act. The Company intends to file a Form D for the Offering following the closing in accordance with the requirements of Regulation D.

**Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.**

On June 21, 2017, in connection with the Offering, the Company filed the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (the "Certificate of Designation") with the Secretary of State of the State of Delaware. Each share of the Series A Preferred Stock is convertible into shares of the Common Stock at any time at the holder's option. The holder, however, will be prohibited from converting shares of the Series A Preferred Stock into shares of the Common Stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 4.99% of the shares of the Common Stock or any other class of any equity security of the Company (other than an exempted security) that is registered pursuant to Section 12 of the Securities Exchange Act of 1934, which may be increased or decreased to any other percentage at the holder's election on 61 days' notice delivered to the Company.

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, after the satisfaction in full of the debts of the Company and the payment of any liquidation preference owed to the holders of shares of capital stock of the Company ranking prior to the Series A Preferred Stock upon liquidation, the holders of the Series A Preferred Stock shall participate *pari passu* with the holders of the Common Stock (on an as-if-converted-to-Common-Stock basis) in the net assets of the Company. Shares of the Series A Preferred Stock will generally have no voting rights, except as required by law. Shares of the Series A Preferred Stock will be entitled to receive dividends before shares of any other class or series of capital stock of the Company (other than dividends in the form of the Common Stock) equal to the dividend payable on each share of the Common Stock, on an as-converted basis.

A copy of the Certificate of Designation relating to the Series A Preferred Stock is filed as Exhibit 3.1 to this Current Report on Form 8-K. The foregoing summary of the terms of the Certificate of Designation is subject to, and qualified in its entirety by, such document, which is incorporated herein by reference.

**Item 8.01 Other Events.**

On June 21, 2017, the Company issued a press release announcing the Offering. A copy of the Company's press release is filed as Exhibit 99.1 to this Current Report on Form 8-K.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<b>Exhibit Number</b>	<b>Description</b>
3.1	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock.

- 10.1 Securities Purchase Agreement, dated June 20, 2017, by and among the Company and the Investors, including the Registration Rights Agreement attached as Exhibit B thereto.
- 99.1 Press Release dated June 21, 2017.

**SIGNATURES**

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

**MADRIGAL PHARMACEUTICALS, INC.**

By: /s/ Marc R. Schneebaum

Name: Marc R. Schneebaum

Title: Chief Financial Officer

Date: June 21, 2017

MADRIGAL PHARMACEUTICALS, INC.

CERTIFICATE OF DESIGNATION OF PREFERENCES, RIGHTS AND LIMITATIONS  
OF  
SERIES A CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 151 OF THE  
DELAWARE GENERAL CORPORATION LAW

The undersigned, Paul A. Friedman, M.D., does hereby certify that:

1. He is the Chief Executive Officer of Madrigal Pharmaceuticals, Inc., a Delaware corporation (the "Corporation").
2. The Corporation is authorized by Article Fourth of its Certificate of Incorporation, as amended (the "Certificate of Incorporation"), to issue 5,000,000 shares of preferred stock, none of which are issued and outstanding.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the Certificate of Incorporation provides for a class of its authorized stock known as preferred stock, consisting of 5,000,000 shares, \$0.0001 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix, and to cause such preferred stock to be issued in series with such voting powers and such designations, preferences and relative, participating, optional or other special rights; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of preferred stock, which shall consist of 1,969,797 shares of the Preferred Stock (as defined below) which the Corporation has the authority to issue, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of Preferred Stock and does hereby determine the rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

**TERMS OF PREFERRED STOCK**

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

"Bloomberg" means Bloomberg Financial Markets.

"Business Day" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

"Closing Bid Price" and "Closing Sale Price" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended

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hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported on the OTC Pink marketplace operated by OTC Markets Group Inc. If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Corporation and the Holder. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

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

“Common Stock” means the Corporation’s common stock, par value \$0.0001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

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

“Convertible Securities” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

“DTC” means the Depository Trust Company.

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

“Fundamental Transaction” means that the Corporation shall, directly or indirectly, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Corporation is the surviving corporation) another Person (but excluding a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Corporation), (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the assets of the Corporation to another Person, (iii) allow another Person to make a purchase, tender or exchange offer that is accepted by the holders of more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), (v) reorganize, recapitalize or reclassify its Common Stock pursuant to which the Common Stock is

effectively converted or exchanged for other securities, cash or property, or (vi) any “person” or “group” (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock.

“Holder” means, as of any date, a registered holder of record of Preferred Stock on the books and records of the Corporation or any registrar or transfer agent for the Preferred Stock.

“Options” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

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

“Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

“Principal Market” means The NASDAQ Global Market.

“Purchase Agreement” means the Securities Purchase Agreement, dated June 20, 2017, among the Corporation, the original Holders and the other parties thereto, as amended, modified or supplemented from time to time in accordance with its terms.

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

“Trading Day” means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock are suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

“Transfer Agent” means Computershare Inc., the current transfer agent for the Common Stock, and any successor transfer agent of the Corporation.

“Weighted Average Price” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly



announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported on the OTC Pink marketplace operated by OTC Markets Group Inc. If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Corporation and the Holder. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

**Section 2. Designation, Amount and Par Value.** This series of preferred stock shall be designated as the Corporation's Series A Convertible Preferred Stock (the "Preferred Stock") and the number of shares so designated shall be 1,969,797. Each share of Preferred Stock shall have a par value of \$0.0001 and a stated value equal to \$15.23 (the "Stated Value"). The Preferred Stock may be represented by certificates or may be issued in book entry only; any references herein to certificates shall also be deemed to refer to book entry notations for such securities, to the extent applicable.

**Section 3. Dividends.** The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends in the form of Common Stock) unless the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to that dividend per share of Preferred Stock as would equal the product of (A) the dividend payable on each share of Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend. Other than as set forth in the previous sentence, no other dividends shall be paid on shares of Preferred Stock, and the Corporation shall pay no dividends (other than dividends in the form of Common Stock) on shares of the Common Stock unless it complies with the previous sentence.

**Section 4. Voting Rights.** The Holders of Preferred Stock have no voting power whatsoever, except as otherwise required by the Delaware General Corporation Law (the "DGCL") as modified by the Certificate of Incorporation.

**Section 5. Liquidation.** Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), after the satisfaction in full of the debts of the Corporation and the payment of any liquidation preference owed to the holders of shares of capital stock of the Corporation ranking prior to the Preferred Stock upon liquidation, the Holders of the Preferred Stock shall participate *pari passu* with the holders of the Common Stock (on an as-if-converted-to-Common-Stock basis without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock) in the net assets of the Corporation. The Corporation shall mail written notice of any such Liquidation, not less than 30 days prior to the payment date stated therein, to each Holder. Neither (i) the consolidation or merger of the Corporation into or with any other entity or entities, (ii) the consolidation or merger of any entity or entities into the Corporation, nor (iii) the sale, lease or conveyance of all or substantially all the Corporation's assets shall be deemed to be a Liquidation within the meaning of this Section 5.

Section 6. Conversion.

(a) Conversions at Option of Holder. Each share of Preferred Stock, or fraction thereof, shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a "Notice of Conversion"), duly completed and executed. Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile or email such Notice of Conversion to the Corporation (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue.

(b) Conversion Price. The conversion price for the Preferred Stock shall equal \$15.23, subject to adjustment as provided herein (the "Conversion Price").

(c) Mechanics of Conversion.

i. Delivery of Certificate Upon Conversion. Not later than three (3) Trading Days after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder one or more certificates representing the Conversion Shares or, upon written notice to the converting Holder, a book-entry statement representing the Conversion Shares which, to the extent provided in the Purchase Agreement, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Purchase Agreement) representing the number of Conversion Shares being acquired upon the conversion of the Preferred Stock. If the Corporation shall fail for any reason or for no reason (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation) to deliver to the Holder within three (3) Trading Days of the Conversion Date a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Corporation's share register or to credit the Holder's balance account with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of shares of Preferred Stock, and if on or after such Trading Day the Holder purchases, or another Person purchases on the Holder's behalf or for the Holder's account (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Corporation (a "Buy-In"), then the Corporation shall, within three (3) Business Days after the Holder's written request and in the Holder's discretion, either (i) pay cash to the

Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Corporation's obligation to deliver such certificate (and to issue such Conversion Shares) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Conversion Shares and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise.

ii. Obligation Absolute. The Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder.

iii. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock and payment of dividends on the Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other Holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock and payment of dividends hereunder. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and non-assessable.

iv. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share.

v. Transfer Taxes and Expenses. The issuance of certificates for shares of the Common Stock on conversion of this Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificates, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate upon conversion in a name other than that of the Holder of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such certificates unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid.

(d) Beneficial Ownership Limitation. Notwithstanding any provision to the contrary contained herein, any Notice of Conversion delivered by or on behalf of the Holder shall be deemed automatically not to have been so delivered by such person to the extent, but only to the extent, the delivery of any shares of Common Stock or any other security otherwise deliverable upon such conversion would result in the Holder in the aggregate (together with the Holder's affiliates and any member of a Section 13(d) "group" with the Holder) having "beneficial ownership" as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder ("Beneficial Ownership") of Common Stock or any other class of any equity security (other than an exempted security) that is registered pursuant to Section 12 of the Exchange Act (a "Class") in excess of the Beneficial Ownership Limitation (as defined below). For purposes of calculating Beneficial Ownership, the aggregate number of shares of Common Stock beneficially owned by the Holder shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which the determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon exercise or conversion of the unexercised or unconverted portion of the Preferred Stock or any other securities of the Corporation beneficially owned by the Holder (including, without limitation, any convertible notes, convertible stock or warrants) that are subject to a limitation on conversion or exercise analogous to the limitation contained herein. Any purported delivery to any Holder of a number of shares of Common Stock or any other security upon conversion of the Preferred Stock shall be void and have no effect to the extent, but only to the extent, that before or after such delivery, the Holder would have Beneficial Ownership of Common Stock or any other Class in excess of the Beneficial Ownership Limitation. The Holder shall disclose to the Corporation the number of shares of Common Stock or other applicable Class that it, its affiliates or any member of a group with the Holder owns or has the right to acquire through the exercise of derivative securities and any limitations on exercise or conversion analogous to the limitation contained herein contemporaneously or immediately prior to submitting a Notice of Conversion. "Beneficial Ownership Limitation" shall initially be 4.99%, and may subsequently be increased or decreased to any other percentage at the Holder's election on 61 days' notice delivered to the Corporation.

#### Section 7. Certain Adjustments.

(a) Adjustment upon Subdivision or Combination of Common Stock. If the Corporation at any time on or after the issuance of the Preferred Stock subdivides (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Conversion Shares will be proportionately increased. If the Corporation at any time on or after the issuance of the Preferred Stock combines (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased and the number of Conversion Shares will be proportionately decreased. Any adjustment under this Section 7(a) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Purchase Rights. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon

complete conversion of its Preferred Stock (without regard to any limitations on the conversion of the Preferred Stock) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights; provided, however, to the extent that the Holder's right to participate in such Purchase Right would result in the Holder's ownership exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent.

(c) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation shall distribute to all holders of Common Stock (and not to the Holders) evidences of its indebtedness or assets (including cash and cash dividends) or rights or warrants to subscribe for or purchase any security other than the Common Stock (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction), then in each such case the Conversion Price shall be adjusted by multiplying the Conversion Price in effect immediately prior to the record date fixed for determination of stockholders entitled to receive such distribution by a fraction of which the denominator shall be the Weighted Average Price determined as of the record date mentioned above, and of which the numerator shall be such Weighted Average Price on such record date less the then per share fair market value at such record date of the portion of such assets or evidence of indebtedness so distributed applicable to one outstanding share of the Common Stock as determined by the Board of Directors in good faith. In either case the adjustments shall be described in a statement provided to the Holder of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

(d) Fundamental Transaction. If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions, effects any Fundamental Transaction, each share of Preferred Stock shall, automatically and without any action on the part of the Holder, be converted at the effective time of such Fundamental Transaction into the right to receive the same consideration to be paid in respect of the outstanding shares of Common Stock as if such share of Preferred Stock had been converted into Common Stock immediately prior to the effective time of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock). If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction ("Alternate Consideration"), then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock upon the effectiveness of such Fundamental Transaction.

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

(f) Notice to the Holders.

i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each

Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder shall remain entitled to convert any portion of this Preferred Stock during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. Miscellaneous.

(a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile or sent by a nationally recognized overnight courier service, addressed to the Corporation, at the following address:

Four Tower Bridge  
200 Barr Harbor Drive, Suite 400  
West Conshohocken, Pennsylvania 19428  
Attention: Chief Executive Officer

With a copy to (which shall not constitute notice) to:

Stradling Yocca Carlson & Rauth, P.C.  
660 Newport Center Drive, Suite 1600  
Newport Beach, California 92656  
Attention: Michael L. Lawhead  
Fax: 949.823.5277

or such other address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 8. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, email, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or mailing address of such Holder appearing on the books of the Corporation, or if no such facsimile number, email address or mailing address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or email (to the extent authorized) prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email (to the extent authorized) on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

(b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay accrued dividends on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

(c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation and, in each case, customary and reasonable indemnity, if requested.

(d) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

(e) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed

interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

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

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

(h) Status of Converted or Redeemed Preferred Stock. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series A Convertible Preferred Stock.

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RESOLVED, FURTHER, that the Chairman, the chief executive officer, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Delaware law.



IN WITNESS WHEREOF, the undersigned has executed this Certificate this 21st day of June 2017.

**Madrigal Pharmaceuticals, Inc.**

By: /s/ Paul A. Friedman, M.D.

Name: Paul A. Friedman, M.D.

Title: Chief Executive Officer

ANNEX A

NOTICE OF CONVERSION

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

The undersigned hereby elects to convert the number of shares of Series A Convertible Preferred Stock indicated below into shares of common stock, par value \$0.0001 per share (the "Common Stock"), of Madrigal Pharmaceuticals, Inc., a Delaware corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Purchase Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion:

Number of shares of Preferred Stock owned prior to Conversion:

Number of shares of Preferred Stock to be Converted:

Stated Value of shares of Preferred Stock to be Converted:

Number of shares of Common Stock to be Issued:

Applicable Conversion Price:

Number of shares of Preferred Stock subsequent to Conversion:

Address for Delivery:

HOLDER:

By: \_\_\_\_\_

Name:

Title:

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**SECURITIES PURCHASE AGREEMENT**

THIS SECURITIES PURCHASE AGREEMENT ("Agreement") is made as of the 20th day of June, 2017 by and among Madrigal Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the Investors set forth on the signature pages affixed hereto (each an "Investor" and collectively the "Investors").

**Recitals**

A. The Company and the Investors are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by the provisions of Regulation D ("Regulation D"), as promulgated by the U.S. Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended; and

B. The Investors wish to purchase, severally and not jointly, from the Company, and the Company wishes to sell and issue to the Investors, upon the terms and conditions stated in this Agreement, shares (the "Shares") of the Company's common stock, par value \$0.0001 per share (together with any securities into which such shares may be reclassified, whether by merger, charter amendment or otherwise, the "Common Stock"); and

C. The Company is also offering to those Investors whose purchase of Shares would result in such Investor, together with its affiliates and certain related parties, beneficially owning more than 4.99% of the Company's outstanding Common Stock immediately following the consummation of this offering, the opportunity, in lieu of purchasing Shares, to purchase shares (the "Preferred Shares") of the Company's Series A Convertible Preferred Stock, par value \$0.0001 per share, having the relative rights, preferences, limitations and powers set forth in the Certificate of Designation in the form attached hereto as Exhibit A (the "Certificate of Designation") with a stated value of \$15.23 per Preferred Share and convertible into shares of Common Stock (the "Conversion Shares") at a conversion price equal to \$15.23, subject to adjustment as provided therein; and

D. The Shares will be sold at a cash purchase price of \$15.23 per Share and the Preferred Shares will be sold at a cash purchase price of \$15.23 per Preferred Share (such purchase prices, the "Purchase Price"); provided, however, that the aggregate gross proceeds of the offering shall be no more than Thirty-Five Million Dollars (\$35,000,000). Any purchase and sale of securities pursuant to this Agreement shall occur at one Closing (as defined below).

In consideration of the mutual promises made herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. In addition to those terms defined above and elsewhere in this Agreement, for the purposes of this Agreement, the following terms shall have the meanings set forth below:

"Affiliate" means, with respect to any Person, any other Person which directly or indirectly through one or more intermediaries Controls, is controlled by, or is under common Control with, such Person.

"BBA Investors" means the Investors that are Affiliates of Baker Bros. Advisors LP.

"Board" means the Board of Directors of the Company.

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“Business Day” means a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

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

“Company’s Knowledge” means the actual knowledge of the executive officers (as defined in Rule 405 under the 1933 Act) of the Company, after due inquiry.

“Confidential Information” means trade secrets, confidential information and know-how (including but not limited to ideas, formulae, compositions, processes, procedures and techniques, research and development information, computer program code, performance specifications, support documentation, drawings, specifications, designs, business and marketing plans, and customer and supplier lists and related information).

“Control” (including the terms “controlling”, “controlled by” or “under common control with”) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Effective Date” means the date on which the initial Registration Statement is declared effective by the SEC.

“Effectiveness Deadline” means the date on which the initial Registration Statement is required to be declared effective by the SEC under the terms of the Section 7.4 hereof.

“Insider” means each director or executive officer of the Company, any other officer of the Company participating in the offering, any beneficial owner of 20% or more of the Company’s outstanding voting equity securities, calculated on the basis of voting power, and any promoter connected with the Company in any capacity on the date hereof.

“Intellectual Property” means all of the following: (i) patents, patent applications, patent disclosures and inventions (whether or not patentable and whether or not reduced to practice); (ii) trademarks, service marks, trade dress, trade names, corporate names, logos, slogans and Internet domain names, together with all goodwill associated with each of the foregoing; (iii) copyrights and copyrightable works; (iv) registrations, applications and renewals for any of the foregoing; and (v) proprietary computer software (including but not limited to data, data bases and documentation).

“Material Adverse Effect” means a material adverse effect on (i) the assets, liabilities, results of operations, condition (financial or otherwise), business, or prospects of the Company and its Subsidiaries taken as a whole, or (ii) the ability of the Company to perform its obligations under the Transaction Documents.

“Material Contract” means any contract, instrument or other agreement to which the Company or any Subsidiary is a party or by which it is bound which is material to the business of the Company and its Subsidiaries, taken as a whole, including those that have been filed or were required to have been filed as an exhibit to the SEC Filings pursuant to Item 601(b)(4) or Item 601(b)(10) of Regulation S-K.

“Nasdaq” means The Nasdaq Global Market.

“Person” means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

“Registration Statement” has the meaning set forth in Section 7.4.

“Required Investors” means (i) prior to Closing, the Investors who have agreed to purchase a majority of the Securities to be sold hereunder on the Closing Date and (ii) from and after the Closing the Investors who, together with their Affiliates, beneficially own (calculated in accordance with Rule 13d-3 under the 1934 Act without giving effect to any limitation on the conversion of the Preferred Shares set forth therein) a majority of the Shares and Conversion Shares issuable pursuant hereto.

“SEC Filings” has the meaning set forth in Section 4.6.

“Securities” means the Shares, the Preferred Shares and the Conversion Shares.

“Subsidiary” of any Person means another Person, an amount of the voting securities, other voting ownership or voting partnership interests of which is sufficient to elect at least a majority of its board of directors or other governing body (or, if there are no such voting interests, 50% or more of the equity interests of which) is owned directly or indirectly by such first Person.

“Transaction Documents” means this Agreement and the Certificate of Designation.

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

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

2. Purchase and Sale of the Securities. Subject to the terms and conditions of this Agreement, on the Closing Date, each of the Investors shall severally, and not jointly, purchase, and the Company shall sell and issue to the Investors, the Shares and the Preferred Shares in the respective amounts set forth opposite the Investors’ names on the Schedule of Investors attached hereto in exchange for the portion of the aggregate Purchase Price set forth on the Schedule of Investors attached hereto.

3. Closing. The closing of the purchase and sale of the Shares and the Preferred Shares (the “Closing”) shall take place at 11:00 a.m. (Eastern Time) as soon as practicable following the satisfaction or waiver of the conditions set forth in Sections 6.1 and 6.2 (the “Closing Date”), remotely by facsimile or other electronic transmission of documents or at such other time and place as the Company and the Investors may mutually agree. At the Closing, subject to the terms and conditions hereof, the Company will deliver to each Investor a certificate or certificates, registered in such name or names as such Investor may designate, representing the Shares and the Preferred Shares purchased by such Investor, dated as of the Closing Date, against payment of the Purchase Price therefor by cash in the form of wire transfer of immediately available funds in accordance with wire instructions provided by the Company to the Investors prior to the Closing, unless other means of payment shall have been agreed upon by the Investors and the Company.

4. Representations and Warranties of the Company. The Company hereby represents and warrants to the Investors that:

4.1 Organization, Good Standing and Qualification. Each of the Company and its Subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has all requisite corporate power and authority to carry on its business as now conducted and to own or lease its properties. Each of the Company and its Subsidiaries is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property makes such qualification or leasing necessary unless the failure to so qualify or to be in good standing has not had and could not reasonably be expected to have a Material Adverse Effect.

4.2 Authorization. The Company has full power and authority and, except for the filing of the Certificate of Designation with the Secretary of State of Delaware has taken all requisite action on the part of the Company, its officers, directors and stockholders necessary for (i) the authorization, execution and delivery of the Transaction Documents, (ii) the authorization of the performance of all obligations of the Company hereunder or thereunder, and (iii) the authorization, issuance (or reservation for issuance) and delivery of the Securities. The Transaction Documents constitute, or upon the execution and delivery thereof by the Company will constitute, the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability, relating to or affecting creditors' rights generally and to general equitable principles.

4.3 Capitalization. The SEC Filings set forth the Company's capitalization as of the date thereof. All of the issued and outstanding shares of the Company's capital stock have been duly authorized and validly issued and are fully paid, nonassessable and free of pre-emptive rights and were issued in full compliance with applicable state and federal securities law and any rights of third parties. All of the issued and outstanding shares of capital stock of each Subsidiary have been duly authorized and validly issued and are fully paid, nonassessable and free of pre-emptive rights, were issued in full compliance with applicable state and federal securities law and any rights of third parties and are owned by the Company, beneficially and of record, subject to no lien, encumbrance or other adverse claim. Except as described in the SEC Filings, no Person is entitled to pre-emptive or similar statutory or contractual rights with respect to any securities of the Company. Except as described in the SEC Filings and except for the Preferred Shares issued pursuant to this Agreement, there are no outstanding warrants, options, convertible securities or other rights, agreements or arrangements of any character under which the Company or any of its Subsidiaries is or may be obligated to issue any equity securities of any kind and except as contemplated by this Agreement. Except as contemplated by this Agreement, the Company is not currently in negotiations for the issuance of any equity securities of any kind. Except as described in the SEC Filings, there are no voting agreements, buy-sell agreements, option or right of first purchase agreements or other agreements of any kind among the Company and any of the securityholders of the Company relating to the securities of the Company held by them. Except as described in the SEC Filings or as contemplated by this Agreement, no Person has the right to require the Company to register any securities of the Company under the 1933 Act, whether on a demand basis or in connection with the registration of securities of the Company for its own account or for the account of any other Person.

The issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any other Person (other than the Investors) and will not result in the adjustment of the exercise, conversion, exchange or reset price of any outstanding security.

The Company does not have outstanding stockholder purchase rights or “poison pill” or any similar arrangement in effect giving any Person the right to purchase any equity interest in the Company upon the occurrence of certain events.

4.4 Valid Issuance. The Shares have been duly and validly authorized and, when issued and paid for pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws. Upon the filing of the Certificate of Designation with the Secretary of State of Delaware, the Preferred Shares will have been duly and validly authorized and, when issued and paid for pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws. Upon the due conversion of the Preferred Shares, the Conversion Shares will be validly issued, fully paid and non-assessable free and clear of all encumbrances and restrictions, except for restrictions on transfer set forth in the Transaction Documents or imposed by applicable securities laws and except for those created by the Investors. The Company has reserved a sufficient number of shares of Common Stock for issuance upon the conversion of the Preferred Shares.

4.5 Consents. Except for the filing of the Certificate of Designation with the Secretary of State of Delaware, the execution, delivery and performance by the Company of the Transaction Documents and the offer, issuance and sale of the Securities require no consent of, action by or in respect of, or filing with, any Person, governmental body, agency, or official other than filings that have been made pursuant to applicable state securities laws and post-sale filings pursuant to applicable state and federal securities laws which the Company undertakes to file within the applicable time periods. Subject to the accuracy of the representations and warranties of each Investor set forth in Section 5 hereof, the Company has taken all action necessary to exempt (i) the issuance and sale of the Securities, (ii) the issuance of the Conversion Shares upon due conversion of the Preferred Shares, and (iii) the other transactions contemplated by the Transaction Documents from the provisions of any stockholder rights plan or other “poison pill” arrangement, any anti-takeover, business combination or control share law or statute binding on the Company or to which the Company or any of its assets and properties may be subject and any provision of the Company’s Certificate of Incorporation or Bylaws that is or could reasonably be expected to become applicable to the Investors as a result of the transactions contemplated hereby, including without limitation, the issuance of the Securities and the ownership, disposition or voting of the Securities by the Investors or the exercise of any right granted to the Investors pursuant to this Agreement or the other Transaction Documents.

4.6 Delivery of SEC Filings: Business. The Company has made available to the Investors through the EDGAR system, true and complete copies of the Company’s most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the “10-K”), and all other reports filed by the Company pursuant to the 1934 Act since the filing of the 10-K and prior to the date hereof (collectively, the “SEC Filings”). The SEC Filings are the only filings required of the Company pursuant to the 1934 Act for such period. The Company and its Subsidiaries are engaged in all material respects only in the business described in the SEC Filings and the SEC Filings contain a complete and accurate description in all material respects of the business of the Company and its Subsidiaries, taken as a whole. Since the filing of each of the SEC Filings, no event has occurred that would require an amendment or supplement to any such SEC Filing and as to which such an amendment or supplement has not been filed prior to the date hereof.

4.7 Use of Proceeds. The net proceeds of the sale of the Shares and the Preferred Shares hereunder shall be used by the Company for working capital and general corporate purposes.

4.8 No Material Adverse Change. Since March 31, 2017, except as identified and described in the SEC Filings or as described on Schedule 4.8, there has not been:

(i) any change in the consolidated assets, liabilities, financial condition or operating results of the Company from that reflected in the financial statements included in the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, except for changes in the ordinary course of business which have not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate;

(ii) any declaration or payment of any dividend, or any authorization or payment of any distribution, on any of the capital stock of the Company, or any redemption or repurchase of any securities of the Company;

(iii) any material damage, destruction or loss, whether or not covered by insurance to any assets or properties of the Company or its Subsidiaries;

(iv) any waiver, not in the ordinary course of business, by the Company or any Subsidiary of a material right or of a material debt owed to it;

(v) any satisfaction or discharge of any lien, claim or encumbrance or payment of any obligation by the Company or a Subsidiary, except in the ordinary course of business and which is not material to the assets, properties, financial condition, operating results or business of the Company and its Subsidiaries taken as a whole (as such business is presently conducted and as it is proposed to be conducted);

(vi) any change or amendment to the Company's Certificate of Incorporation or Bylaws, or material change to any material contract or arrangement by which the Company or any Subsidiary is bound or to which any of their respective assets or properties is subject;

(vii) any material labor difficulties or labor union organizing activities with respect to employees of the Company or any Subsidiary;

(viii) any material transaction entered into by the Company or a Subsidiary other than in the ordinary course of business;

(ix) the loss of the services of any executive officer, other key employee, or material change in the composition or duties of the senior management of the Company or any Subsidiary;

(x) the loss or threatened loss of any customer which has had or could reasonably be expected to have a Material Adverse Effect;  
or

(xi) any other event or condition of any character that has had or could reasonably be expected to have a Material Adverse Effect.



4.9 SEC Filings; S-3 Eligibility.

(a) At the time of filing thereof, the SEC Filings complied as to form in all material respects with the requirements of the 1934 Act and did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading.

(b) The Company is eligible to use Form S-3 to register the Registrable Securities (as such term is defined in Section 7.4 hereof) for sale or other disposition by the Investors.

4.10 No Conflict, Breach, Violation or Default. The execution, delivery and performance of the Transaction Documents by the Company and the issuance and sale of the Securities will not (i) conflict with or result in a breach or violation of (a) any of the terms and provisions of, or constitute a default under the Company's Certificate of Incorporation or the Company's Bylaws, both as in effect on the date hereof (true and complete copies of which have been made available to the Investors through the EDGAR system), or (b) any statute, rule, regulation or order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company, any Subsidiary or any of their respective assets or properties, except, in the case of clause (b) only, for such conflicts, breaches or violations as have not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any lien, encumbrance or other adverse claim upon any of the properties or assets of the Company or any Subsidiary or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any Material Contract, except for such as have not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate.

4.11 Tax Matters. The Company and each Subsidiary has timely prepared and filed (or has obtained an extension of time within which to file) all tax returns required to have been filed by the Company or such Subsidiary with all appropriate governmental agencies and timely paid all taxes shown thereon or otherwise owed by it, other than taxes being contested in good faith and for which adequate reserves have been made on the Company's financial statements included in the SEC Filings, except where the failure to so file or the failure to so pay has not had and could not reasonably be expected to have a Material Adverse Effect. The charges, accruals and reserves on the books of the Company in respect of taxes for all fiscal periods are adequate in all material respects, and there are no material unpaid assessments against the Company or any Subsidiary nor, to the Company's Knowledge, any basis for the assessment of any additional taxes, penalties or interest for any fiscal period or audits by any federal, state or local taxing authority except for any assessment which is not material to the Company and its Subsidiaries, taken as a whole. All taxes and other assessments and levies that the Company or any Subsidiary is required to withhold or to collect for payment have been duly withheld and collected and paid to the proper governmental entity or third party when due, other than taxes being contested in good faith and for which adequate reserves have been made on the Company's financial statements included in the SEC Filings, except where the failure to so withhold, collect or pay has not had and could not reasonably be expected to have a Material Adverse Effect. There are no tax liens or claims pending or, to the Company's Knowledge, threatened against the Company or any Subsidiary or any of their respective assets or property. Except as described in the SEC Filings, there are no outstanding tax sharing agreements or other such arrangements between the Company and any Subsidiary or other corporation or entity.

4.12 Title to Properties. Except as disclosed in the SEC Filings, the Company and each Subsidiary has good and marketable title to all real properties and all other properties and assets owned by it, in each case free from liens, encumbrances and defects that would materially affect the value thereof or materially interfere with the use made or currently planned to be made thereof by them; and except as disclosed in the SEC Filings, the Company and each Subsidiary holds any leased real or personal property under valid and enforceable leases with no exceptions that would materially interfere with the use made or currently planned to be made thereof by them.

4.13 Certificates, Authorities and Permits. The Company and each Subsidiary possess adequate certificates, authorities or permits issued by appropriate governmental agencies or bodies necessary to conduct the business now operated by them, except where the failure to so possess has not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate, and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authority or permit that, if determined adversely to the Company or such Subsidiary, could reasonably be expected to have a Material Adverse Effect, individually or in the aggregate.

4.14 Labor Matters.

(a) Except as described in the SEC Filings, the Company is not a party to or bound by any collective bargaining agreements or other agreements with labor organizations. The Company has not violated in any material respect any laws, regulations, orders or contract terms, affecting the collective bargaining rights of employees, labor organizations or any laws, regulations or orders affecting employment discrimination, equal opportunity employment, or employees' health, safety, welfare, wages and hours.

(b) (i) There are no labor disputes existing, or to the Company's Knowledge, threatened, involving strikes, slow-downs, work stoppages, job actions, disputes, lockouts or any other disruptions of or by the Company's employees, (ii) there are no unfair labor practices or petitions for election pending or, to the Company's Knowledge, threatened before the National Labor Relations Board or any other federal, state or local labor commission relating to the Company's employees, (iii) no demand for recognition or certification heretofore made by any labor organization or group of employees is pending with respect to the Company and (iv) to the Company's Knowledge, the Company enjoys good labor and employee relations with its employees and labor organizations.

(c) The Company is, and at all times has been, in compliance with all applicable laws respecting employment (including laws relating to classification of employees and independent contractors) and employment practices, terms and conditions of employment, wages and hours, and immigration and naturalization, except for such instances of non-compliance as have not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate. There are no claims pending against the Company before the Equal Employment Opportunity Commission or any other administrative body or in any court asserting any violation of Title VII of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, 42 U.S.C. §§ 1981 or 1983 or any other federal, state or local Law, statute or ordinance barring discrimination in employment.

(d) Except as disclosed in the SEC Filings or as described on Schedule 4.14, the Company is not a party to, or bound by, any employment or other contract or agreement that contains any severance, termination pay or change of control liability or obligation, including, without limitation, any “excess parachute payment,” as defined in Section 280G(b) of the Internal Revenue Code.

(e) Except as disclosed in the SEC Filings, each of the Company’s employees is a Person who is either a United States citizen or a permanent resident entitled to work in the United States. To the Company’s Knowledge, the Company has no liability for the improper classification by the Company of such employees as independent contractors or leased employees prior to the Closing.

#### 4.15 Intellectual Property.

(a) All Intellectual Property of the Company and its Subsidiaries is currently in compliance in all material respects with all legal requirements (including timely filings, proofs and payments of fees) and is valid and enforceable. No Intellectual Property of the Company or its Subsidiaries which is necessary for the conduct of the Company’s and each of its Subsidiaries’ respective businesses as currently conducted or as currently proposed to be conducted has been or is now involved in any cancellation, dispute or litigation, and, to the Company’s Knowledge, no such action is threatened. No patent of the Company or its Subsidiaries has been or is now involved in any interference, reissue, re-examination or opposition proceeding.

(b) All of the licenses and sublicenses and consent, royalty or other agreements concerning Intellectual Property which are necessary for the conduct of the Company’s and each of its Subsidiaries’ respective businesses as currently conducted or as currently proposed to be conducted to which the Company or any Subsidiary is a party or by which any of their assets are bound (other than generally commercially available, non-custom, off-the-shelf software application programs having a retail acquisition price of less than \$10,000 per license) (collectively, “License Agreements”) are valid and binding obligations of the Company or its Subsidiaries that are parties thereto and, to the Company’s Knowledge, the other parties thereto, enforceable in accordance with their terms, except to the extent that enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other similar laws affecting the enforcement of creditors’ rights generally, and there exists no event or condition which will result in a violation or breach of or constitute (with or without due notice or lapse of time or both) a default by the Company or any of its Subsidiaries under any such License Agreement, except for such violations, breaches and defaults as have not had and could not reasonably be expected to have a Material Adverse Effect, individually or in the aggregate.

(c) The Company and its Subsidiaries own or have the valid right to use all of the Intellectual Property that is necessary for the conduct of the Company’s and each of its Subsidiaries’ respective businesses as currently conducted or as currently proposed to be conducted and for the ownership, maintenance and operation of the Company’s and its Subsidiaries’ properties and assets, free and clear of all liens, encumbrances, adverse claims or obligations to license all such owned Intellectual Property and Confidential Information, other than licenses entered into in the ordinary course of the Company’s and its Subsidiaries’ businesses. The Company and its Subsidiaries have a valid and

enforceable right to use all third party Intellectual Property and Confidential Information used or held for use in the respective businesses of the Company and its Subsidiaries.

(d) The conduct of the Company's and its Subsidiaries' businesses as currently conducted does not infringe or otherwise impair or conflict with (collectively, "Infringe") any Intellectual Property rights of any third party or any confidentiality obligation owed to a third party, and, to the Company's Knowledge, the Intellectual Property and Confidential Information of the Company and its Subsidiaries which are necessary for the conduct of Company's and each of its Subsidiaries' respective businesses as currently conducted or as currently proposed to be conducted are not being Infringed by any third party. There is no litigation or order pending or outstanding or, to the Company's Knowledge, threatened or imminent, that seeks to limit or challenge or that concerns the ownership, use, validity or enforceability of any Intellectual Property or Confidential Information of the Company and its Subsidiaries and the Company's and its Subsidiaries' use of any Intellectual Property or Confidential Information owned by a third party, and, to the Company's Knowledge, there is no valid basis for the same.

(e) The consummation of the transactions contemplated hereby and by the other Transaction Documents will not result in the alteration, loss, impairment of or restriction on the Company's or any of its Subsidiaries' ownership or right to use any of the Intellectual Property or Confidential Information which is necessary for the conduct of Company's and each of its Subsidiaries' respective businesses as currently conducted or as currently proposed to be conducted.

(f) The Company and its Subsidiaries have taken reasonable steps to protect the Company's and its Subsidiaries' rights in their Intellectual Property and Confidential Information. Each employee, consultant and contractor who has had access to Confidential Information which is necessary for the conduct of Company's and each of its Subsidiaries' respective businesses as currently conducted or as currently proposed to be conducted has executed an agreement to maintain the confidentiality of such Confidential Information and has executed appropriate agreements that are substantially consistent with the Company's standard forms thereof. Except under confidentiality obligations, there has been no material disclosure of any of the Company's or its Subsidiaries' Confidential Information to any third party.

4.16 FDA Matters. Except as would not, individually or in the aggregate, result in a Material Adverse Effect: (i) the Company and each of its Subsidiaries is and has been in compliance with statutes, laws, ordinances, rules and regulations applicable to the Company or its Subsidiaries for the ownership, testing, development, manufacture, packaging, processing, use, labeling, storage, or disposal of any product manufactured by or on behalf of the Company or any of its Subsidiaries or out-licensed by the Company or any of its Subsidiaries (a "Company Product"), including without limitation, the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301, et seq., the Public Health Service Act, 42 U.S.C. § 262, similar laws of other governmental entities and the regulations promulgated pursuant to such laws (collectively, "Applicable Laws"); (ii) the Company and each of its Subsidiaries possesses all licenses, certificates, approvals, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws and/or for the ownership of its properties or the conduct of its business as it relates to a Company Product and as described in the SEC Filings (collectively, "Authorizations") and such Authorizations are valid and in full force and effect and the Company and each of its Subsidiaries is not in violation of any term of any such Authorizations; (iii) neither the Company nor any of its Subsidiaries has received any written notice of adverse finding, warning letter or other written

correspondence or notice from the U.S. Food and Drug Administration (the “FDA”) or any other governmental entity alleging or asserting noncompliance with any Applicable Laws or Authorizations relating to a Company Product; (iv) neither the Company nor any of its Subsidiaries has received written notice of any ongoing claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental entity or third party alleging that any Company Product, operation or activity related to a Company Product is in violation of any Applicable Laws or Authorizations or has any knowledge that any such governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, nor, to the Company’s Knowledge, has there been any noncompliance with or violation of any Applicable Laws by the Company or any of its Subsidiaries that would reasonably be expected to require the issuance of any such written notice or result in an investigation, corrective action, or enforcement action by the FDA or similar governmental entity with respect to a Company Product; (v) neither the Company nor any of its Subsidiaries has received written notice that any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such governmental entity has threatened or is considering such action with respect to a Company Product; and (vi) the Company and each of its Subsidiaries has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete, correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission). To the Company’s Knowledge, neither the Company nor any of Subsidiaries nor any of its or their directors, officers, employees or agents, has made, or caused the making of, any false statements on, or material omissions from, any other records or documentation prepared or maintained to comply with the requirements of the FDA or any other governmental entity.

4.17 Environmental Matters. Neither the Company nor any Subsidiary is in violation of any statute, rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, “Environmental Laws”), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim has had or could reasonably be expected to have a Material Adverse Effect, individually or in the aggregate; and there is no pending or, to the Company’s Knowledge, threatened investigation that might lead to such a claim.

4.18 Litigation. Except as described in the SEC Filings, there are no pending actions, suits or proceedings against or affecting the Company, its Subsidiaries or any of its or their properties; and to the Company’s Knowledge, no such actions, suits or proceedings are threatened or contemplated. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or since January 1, 2012 has been the subject of any action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the Company’s Knowledge, there is not pending or contemplated, any investigation by the SEC involving the Company or any current or former director or officer of the Company. The SEC has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the 1933 Act or the 1934 Act.

4.19 Financial Statements. The financial statements included in each SEC Filing comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing (or to the extent corrected by a subsequent restatement) and present fairly, in all material respects, the consolidated financial position of the Company and its Subsidiaries as of the dates shown and their consolidated results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with United States generally accepted accounting principles applied on a consistent basis (“GAAP”) (except as may be disclosed therein or in the notes thereto, and, in the case of quarterly financial statements, as permitted by Form 10-Q under the 1934 Act). Except as set forth in the financial statements of the Company included in the SEC Filings filed prior to the date hereof, neither the Company nor any of its Subsidiaries has incurred any liabilities, contingent or otherwise, except those incurred in the ordinary course of business, consistent (as to amount and nature) with past practices since the date of such financial statements, none of which, individually or in the aggregate, have had or could reasonably be expected to have a Material Adverse Effect.

4.20 Insurance Coverage. The Company and each Subsidiary maintains in full force and effect insurance coverage that is customary for comparably situated companies for the business being conducted and properties owned or leased by the Company and each Subsidiary, and the Company reasonably believes such insurance coverage to be adequate against all liabilities, claims and risks against which it is customary for comparably situated companies to insure.

4.21 Compliance with Nasdaq Continued Listing Requirements. The Company is in compliance with applicable Nasdaq continued listing requirements. There are no proceedings pending or, to the Company’s Knowledge, threatened against the Company relating to the continued listing of the Common Stock on Nasdaq and the Company has not received any notice of, nor to the Company’s Knowledge is there any basis for, the delisting of the Common Stock from Nasdaq.

4.22 Brokers and Finders. No Person will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company, any Subsidiary or an Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Company, other than as disclosed to the Investors in writing on or prior to the date hereof.

4.23 No General Solicitation. Neither the Company nor any Person acting on its behalf has conducted any general solicitation or general advertising (as those terms are used in Regulation D) in connection with the offer or sale of any of the Securities.

4.24 No Integrated Offering. Neither the Company nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any Company security or solicited any offers to buy any security, under circumstances that would adversely affect reliance by the Company on Section 4(a)(2) for the exemption from registration for the transactions contemplated hereby or would require registration of the Securities under the 1933 Act.

4.25 Rule 506 Compliance. To the Company’s knowledge, neither the Company nor any Insider is subject to any of the “Bad Actor” disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a “Disqualification Event”), except for a Disqualification Event covered by Rule 506(d)(2)(i) or (d)(3) of the 1933 Act. The Company is not disqualified from

relying on Rule 506 of Regulation D under the 1933 Act (“Rule 506”) for any of the reasons stated in Rule 506(d) in connection with the issuance and sale of the Securities to the Investors pursuant to this Agreement. The Company has exercised reasonable care, including without limitation, conducting a factual inquiry that is appropriate in light of the circumstances, into whether any such disqualification under Rule 506(d) exists. The Company has furnished to each Investor, a reasonable time prior to the date hereof, a description in writing of any matters relating to the Company and the Insiders that would have triggered disqualification under Rule 506(d) but which occurred before September 23, 2013, in each case, in compliance with the disclosure requirements of Rule 506(e). The Company has exercised reasonable care, including without limitation, conducting a factual inquiry that is appropriate in light of the circumstances, into whether any such disqualification under Rule 506(d) would have existed and whether any disclosure is required to be made to Investor under Rule 506(e). Any outstanding securities of the Company (of any kind or nature) that were issued in reliance on Rule 506 at any time on or after September 23, 2013 have been issued in compliance with Rule 506(d) and (e).

4.26 Private Placement. The offer and sale of the Securities to the Investors as contemplated hereby is exempt from the registration requirements of the 1933 Act.

4.27 Shell Company Status. The Company is not, and has never been, an issuer identified in Rule 144(i)(1).

4.28 Questionable Payments. Neither the Company nor any of its Subsidiaries nor, to the Company’s Knowledge, any of their respective current or former stockholders, directors, officers, employees, agents or other Persons acting on behalf of the Company or any Subsidiary, has on behalf of the Company or any Subsidiary or in connection with their respective businesses: (a) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (b) made any direct or indirect unlawful payments to any governmental officials or employees from corporate funds; (c) established or maintained any unlawful or unrecorded fund of corporate monies or other assets; (d) made any false or fictitious entries on the books and records of the Company or any Subsidiary; or (e) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment of any nature.

4.29 Transactions with Affiliates. Except as disclosed in the SEC Filings, none of the officers or directors of the Company and, to the Company’s Knowledge, none of the employees of the Company is presently a party to any transaction with the Company or any Subsidiary (other than as holders of stock options and/or warrants, and for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the Company’s Knowledge, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner.

4.30 Internal Controls. The Company is in material compliance with the provisions of the Sarbanes-Oxley Act of 2002 currently applicable to the Company. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any differences.

The Company has established disclosure controls and procedures (as defined in 1934 Act Rules 13a-15(e) and 15d-15(e)) for the Company and designed such disclosure controls and procedures to ensure that material information relating to the Company, including the Subsidiaries, is made known to the certifying officers by others within those entities, particularly during the period in which the Company's most recently filed periodic report under the 1934 Act, as the case may be, is being prepared. The Company has established internal control over financial reporting (as defined in 1934 Act Rules 13a-15(f) and 15d-15(f)) to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures and the Company's internal control over financial reporting (collectively, "internal controls") as of the end of the period covered by the most recently filed periodic report under the 1934 Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the 1934 Act the conclusions of the certifying officers about the effectiveness of such internal controls based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no significant changes in the Company's internal controls or, to the Company's Knowledge, in other factors that could significantly affect the Company's internal controls. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with GAAP and the applicable requirements of the 1934 Act.

4.31 Disclosures. Neither the Company nor any Person acting on its behalf has provided the Investors or their agents or counsel with any information that constitutes or might constitute material, non-public information, other than the terms of the transactions contemplated hereby. The written materials delivered to the Investors in connection with the transactions contemplated by the Transaction Documents do not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading.

4.32 Investment Company. The Company is not required to be registered as, and is not an Affiliate of, and immediately following the Closing will not be required to register as, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

4.33. No Fiduciary. The Company acknowledges that none of the Investors is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement, the other Transaction Documents and the transactions contemplated hereby and thereby, and any advice or other guidance provided by any Investor or any of its representatives and agents with respect to this Agreement, the other Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Investor's entry into such transactions. The Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation by the Company and its representatives and agents.

5. Representations and Warranties of the Investors. Each of the Investors hereby severally, and not jointly, represents and warrants to the Company that:

5.1 Organization and Existence. If applicable, such Investor is a validly existing corporation, limited partnership or limited liability company and has all requisite corporate, partnership or limited liability company power and authority to invest in the Securities pursuant to this Agreement.



5.2 Authorization. The execution, delivery and performance by such Investor of the Transaction Documents to which such Investor is a party have been duly authorized and each will constitute the valid and legally binding obligation of such Investor, enforceable against such Investor in accordance with their respective terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability, relating to or affecting creditors' rights generally and to general equity principles.

5.3 Purchase Entirely for Own Account. The Securities to be received by such Investor hereunder will be acquired for such Investor's own account, not as nominee or agent, and not with a view to the resale or distribution of any part thereof in violation of the 1933 Act, and such Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the 1933 Act without prejudice, however, to such Investor's right at all times to sell or otherwise dispose of all or any part of such Securities in compliance with applicable federal and state securities laws. Nothing contained herein shall be deemed a representation or warranty by such Investor to hold the Securities for any period of time. Such Investor is not a broker-dealer registered with the SEC under the 1934 Act or an entity engaged in a business that would require it to be so registered.

5.4 Investment Experience. Such Investor acknowledges that it can bear the economic risk and complete loss of its investment in the Securities and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment contemplated hereby.

5.5 Disclosure of Information. Such Investor has had an opportunity to receive all information related to the Company requested by it and to ask questions of and receive answers from the Company regarding the Company, its business and the terms and conditions of the offering of the Securities. Such Investor acknowledges receipt of copies of the SEC Filings. Neither such inquiries nor any other due diligence investigation conducted by such Investor shall modify, limit or otherwise affect such Investor's right to rely on the Company's representations and warranties contained in this Agreement.

5.6 Restricted Securities. Such Investor understands that the Securities are characterized as "restricted securities" under the U.S. federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such securities may be resold without registration under the 1933 Act only in certain limited circumstances.

5.7 Legends.

(a) It is understood that, except as provided below, certificates evidencing the Securities may bear the following or any similar legend:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND, ACCORDINGLY, MAY NOT BE TRANSFERRED UNLESS (I) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT OF 1933, AS AMENDED, (II) SUCH SECURITIES MAY BE SOLD

PURSUANT TO RULE 144, OR (III) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

(b) If required by the authorities of any state in connection with the issuance of sale of the Securities, the legend required by such state authority.

5.8 Investor Status. At the time such Investor was offered the Securities, it was, and at the date hereof it is, (i) an “accredited investor” as defined in Rule 501(a) under the 1933 Act and (ii) an “institutional investor” as defined in Financial Industry Regulatory Authority Rule 5110(d)(4) (B). Such Investor is not a registered broker dealer registered under Section 15(a) of the Exchange Act, or a member of the Financial Industry Regulatory Authority, Inc. (“FINRA”) or an entity engaged in the business of being a broker dealer. Except as otherwise disclosed in writing to the Company on or prior to the date of this Agreement, such Investor is not affiliated with any broker dealer registered under Section 15(a) of the 1934 Act, or a member of FINRA or an entity engaged in the business of being a broker dealer. After giving effect to the purchase of the Securities hereunder, such Investor, together with its Affiliates, will not beneficially own more than 19.9% of the Company’s outstanding Common Stock or voting power. Such Investor maintains his or her principal residence (in the case of an individual) or its principal executive office (in the case of an entity) at the location specified on its signature page hereto.

5.9 No General Solicitation. Such Investor did not learn of the investment in the Securities as a result of any general solicitation or general advertising.

5.10 Brokers and Finders. No Person will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company, any Subsidiary or an Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of such Investor.

5.11 Prohibited Transactions. Since the earlier of (a) such time as such Investor was first contacted by the Company or any other Person acting on behalf of the Company regarding the transactions contemplated hereby or (b) thirty (30) days prior to the date hereof, neither such Investor nor any Affiliate of such Investor which (x) had knowledge of the transactions contemplated hereby, (y) has or shares discretion relating to such Investor’s investments or trading or information concerning such Investor’s investments, including in respect of the Securities, or (z) is subject to such Investor’s review or input concerning such Affiliate’s investments or trading (collectively, “Trading Affiliates”) has, directly or indirectly, effected or agreed to effect any short sale, whether or not against the box, established any “put equivalent position” (as defined in Rule 16a-1(h) under the 1934 Act) with respect to the Common Stock, granted any other right (including, without limitation, any put or call option) with respect to the Common Stock or with respect to any security that includes, relates to or derived any significant part of its value from the Common Stock or otherwise sought to hedge its position in the Securities (each, a “Prohibited Transaction”). Prior to the earliest to occur of (i) the termination of this Agreement, (ii) the Effective Date or (iii) the Effectiveness Deadline, such Investor shall not, and shall cause its Trading Affiliates not to, engage, directly or indirectly, in a Prohibited Transaction. Such Investor acknowledges that the representations, warranties and covenants contained in this Section 5.11 are being made for the benefit of the Investors as well as the Company and that each of the other Investors shall have an independent right to assert any claims against such Investor arising out of any breach or violation of the provisions of this Section 5.11.

6. Conditions to Closing.

6.1 Conditions to the Investors' Obligations. The obligation of each Investor to purchase the Shares and the Preferred Shares at the Closing is subject to the satisfaction, on or prior to the Closing Date, of the following conditions, any of which may be waived by such Investor (as to itself only):

- (a) The representations and warranties made by the Company in Section 4 hereof qualified as to materiality shall be true and correct at all times prior to and on the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct as of such earlier date, and the representations and warranties made by the Company in Section 4 hereof not qualified as to materiality shall be true and correct in all material respects at all times prior to and on the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the Closing Date.
- (b) The Company shall have obtained any and all consents, permits, approvals, registrations and waivers necessary or appropriate for consummation of the purchase and sale of the Securities and the consummation of the other transactions contemplated by the Transaction Documents, all of which shall be in full force and effect.
- (c) The Certificate of Designation shall have been filed with the Secretary of State of Delaware and shall have become effective, and the Company shall have provided a filed copy thereof to any Investor purchasing Preferred Shares.
- (d) The Company shall have filed with Nasdaq a Notification Form: Listing of Additional Shares for the listing of the Shares and the Conversion Shares on Nasdaq, a copy of which shall have been provided to the Investors, and Nasdaq shall not have raised any unresolved objection thereto.
- (e) No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, or any order of or by any governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Documents.
- (f) The Company shall have delivered a Certificate, executed on behalf of the Company by its Chief Executive Officer or its Chief Financial Officer, dated as of the Closing Date, certifying to the fulfillment of the conditions specified in subsections (a), (b), (c) and (i) of this Section 6.1.
- (g) The Company shall have delivered a Certificate, executed on behalf of the Company by its Secretary, dated as of the Closing Date, certifying the resolutions adopted by the Board, or a duly appointed committee thereof, approving the transactions contemplated by this Agreement and the other Transaction Documents and the issuance of the Securities, certifying the current versions of the Certificate of Incorporation and

Bylaws of the Company and certifying as to the signatures and authority of persons signing the Transaction Documents and related documents on behalf of the Company.

(h) The Investors shall have received an opinion from Stradling Yocca Carlson & Rauth, P.C., the Company's outside counsel, dated as of the Closing Date, in form and substance reasonably acceptable to the BBA Investors and addressing such legal matters as the BBA Investors may reasonably request.

(i) No stop order or suspension of trading shall have been imposed by Nasdaq, the SEC or any other governmental or regulatory body with respect to public trading in the Common Stock.

6.2 Conditions to Obligations of the Company. The Company's obligation to sell and issue the Shares and the Preferred Shares at the Closing is subject to the satisfaction on or prior to the Closing Date of the following conditions, any of which may be waived by the Company:

(a) The representations and warranties made by the Investors in Section 5 hereof, other than the representations and warranties contained in Sections 5.3, 5.4, 5.5, 5.6, 5.7, 5.8 and 5.9 (the "Investment Representations"), shall be true and correct in all material respects when made, and shall be true and correct in all material respects on the Closing Date with the same force and effect as if they had been made on and as of said date. The Investment Representations shall be true and correct in all respects when made, and shall be true and correct in all respects on the Closing Date with the same force and effect as if they had been made on and as of said date. The Investors shall have performed in all material respects all obligations and covenants herein required to be performed by them on or prior to the Closing Date.

(b) The Investors shall have delivered the Purchase Price to the Company.

6.3 Termination of Obligations to Effect Closing: Effects.

(a) The obligations of the Company, on the one hand, and the Investors, on the other hand, to effect the Closing shall terminate as follows:

(i) Upon the mutual written consent of the Company and the Required Investors;

(ii) By the Company if any of the conditions set forth in Section 6.2 shall have become incapable of fulfillment, and shall not have been waived by the Company;

(iii) By an Investor (with respect to itself only) if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by the Investor; or

(iv) By either the Company or any Investor (with respect to itself only) if the Closing has not occurred on or prior to 5:00 P.M., New York time, on the fifth (5<sup>th</sup>) Business Day after the date of this Agreement;

provided, however, that, except in the case of clause (i) above, the party seeking to terminate its obligation to effect the Closing shall not then be in breach of any of its

representations, warranties, covenants or agreements contained in this Agreement or the other Transaction Documents if such breach has resulted in the circumstances giving rise to such party's seeking to terminate its obligation to effect the Closing.

(b) In the event of termination by the Company or any Investor of its obligations to effect the Closing pursuant to this Section 6.3, written notice thereof shall forthwith be given to the other Investors by the Company and the other Investors shall have the right to terminate their obligations to effect the Closing upon written notice to the Company and the other Investors. Nothing in this Section 6.3 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents.

#### 7. Covenants and Agreements of the Company.

7.1 Reservation of Common Stock. The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of providing for the conversion of the Preferred Shares, such number of shares of Common Stock as shall from time to time equal the number of shares sufficient to permit the conversion of the Preferred Shares issued pursuant to this Agreement in accordance with their respective terms.

7.2 Reports. The Company will furnish to the Investors and/or their assignees such information relating to the Company and its Subsidiaries as from time to time may reasonably be requested by the Investors and/or their assignees; provided, however, that the Company shall not disclose material nonpublic information to the Investors, or to advisors to or representatives of the Investors, unless prior to disclosure of such information the Company identifies such information as being material nonpublic information and provides the Investors, such advisors and representatives with the opportunity to accept or refuse to accept such material nonpublic information for review and any Investor wishing to obtain such information enters into an appropriate confidentiality agreement with the Company with respect thereto.

7.3 No Conflicting Agreements. The Company will not take any action, enter into any agreement or make any commitment that would conflict or interfere in any material respect with the Company's obligations to the Investors under the Transaction Documents.

#### 7.4 Registration Rights.

(a) The Company shall, as soon as reasonably practicable and in any event within thirty (30) days immediately following the Closing Date, prepare and file with the SEC a registration statement on Form S-3 (a "Registration Statement") in order to register with the SEC under the 1933 Act for resale by the Investors on a delayed or continuous basis pursuant to Rule 415 under the 1933 Act any or all of the Shares purchased by such Investors on the Closing Date (the "Registrable Securities").

(b) The Company shall use its reasonable efforts to cause such Registration Statement to become effective (the "Effective Date") within ninety (90) days immediately following the Closing Date (the "Effectiveness Deadline") and take all other reasonable actions necessary under any federal law or regulation to permit all Registrable Securities to be sold or otherwise disposed of.

(c) If at any time, there is not an effective Registration Statement covering all of the Registrable Securities and the Company shall determine to prepare and file with the SEC a registration statement relating to an offering for its own account or the account of others under the 1933 Act of any of its equity securities, other than on Form S-4 or Form S-8 (each as promulgated under the 1933 Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with stock option or other employee benefit plans, send to each Investor not then eligible to sell all of their Registrable Securities under Rule 144 in a three-month period, written notice of such determination and if, within ten days after receipt of such notice, any such Investor shall so request in writing, shall include in such registration statement all or any part of such Registrable Securities such Investor requests to be registered.

(d) The Company shall promptly notify each Investor, at any time when a prospectus relating to such Registration Statement is required to be delivered under the 1933 Act, of the happening of any event as a result of which the prospectus included in or relating to such Registration Statement contains an untrue statement of a material fact or omits to state any fact necessary to make the statements therein not misleading;

(e) The Company shall promptly prepare and file with the SEC, and deliver to each Investor, such amendments and supplements to such Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Registration Statement effective until the third anniversary of the Closing Date.

(f) The Company shall bear all expenses in connection with the registration procedures set forth in this Section 7.4, other than any expenses relating to the sale of the Registrable Securities by the Investors, including broker's commission, discounts or fees and transfer taxes.

(g) If at any time after the Closing Date, the BBA Investors determine, based on the totality of the circumstances, that they may be deemed to be "affiliates" of the Company within the meaning of Rule 144 of the 1933 Act, whether through the exercise of their board designation rights as provided in Section 7.11 or otherwise, the Company shall enter into the registration rights agreement with the BBA Investors in the form attached hereto as Exhibit B.

7.5 Compliance with Laws. The Company will comply in all material respects with all applicable laws, rules, regulations, orders and decrees of all governmental authorities.

7.6 Listing of Underlying Shares and Related Matters. Promptly following the date hereof, the Company shall take all necessary action to cause the Shares and the Conversion Shares to be listed on Nasdaq no later than the Closing Date. Further, if the Company applies to have its Common Stock or other securities traded on any other principal stock exchange or market, it shall include in such application the Shares and the Conversion Shares and will take such other action as is necessary to cause such Common Stock to be so listed. The Company will use commercially reasonable efforts to continue the listing and trading of its Common Stock on Nasdaq and, in accordance, therewith, will use commercially reasonable efforts to comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of such market or exchange, as applicable.

7.7 Removal of Legends. In connection with any sale or disposition of the Securities by an Investor pursuant to Rule 144 or pursuant to any other exemption under the 1933 Act such that the purchaser acquires freely tradable shares and upon compliance by the Investor with the requirements of this Agreement, the Company shall or, in the case of Common Stock, shall cause the transfer agent for the Common Stock (the “Transfer Agent”) to issue replacement certificates representing the Securities sold or disposed of without restrictive legends. Upon the earlier of (i) registration for resale of the Registrable Securities or (ii) the Shares becoming freely tradable by a non-affiliate pursuant to Rule 144, the Company shall (A) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall reissue a certificate representing shares of Common Stock without legends upon receipt by such Transfer Agent of the legended certificates for such shares, together with either (1) a customary representation by the Investor that Rule 144 applies to the shares of Common Stock represented thereby or (2) a statement by the Investor that such Investor will sell (or, in the case of any Affiliate of the Company has sold) the shares of Common Stock represented thereby in accordance with the Plan of Distribution contained in the Registration Statement, and (B) cause its counsel to deliver to the Transfer Agent one or more blanket opinions to the effect that the removal of such legends in such circumstances may be effected under the 1933 Act. From and after the earlier of such dates, upon an Investor’s written request, the Company shall promptly cause certificates evidencing the Investor’s Securities to be replaced with certificates which do not bear such restrictive legends, and Conversion Shares subsequently issued upon due conversion of the Preferred Shares shall not bear such restrictive legends provided the provisions of either clause (i) or clause (ii) above, as applicable, are satisfied with respect thereto.

Upon written notice to the Investor, the Company can elect to issue book-entry notations in lieu of certificates for shares of Common Stock. When the Company is required to cause an unlegended certificate to replace a previously issued legended certificate, if: (1) the unlegended certificate is not delivered to an Investor within three (3) Business Days of submission by that Investor of a legended certificate and supporting documentation to the Transfer Agent as provided above and (2) prior to the time such unlegended certificate is received by the Investor, the Investor, or any third party on behalf of such Investor or for the Investor’s account, purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Investor of shares represented by such certificate (a “Buy-In”), then the Company shall pay in cash to the Investor (for costs incurred either directly by such Investor or on behalf of a third party) the amount by which the total purchase price paid for Common Stock as a result of the Buy-In (including brokerage commissions, if any) exceeds the proceeds received by such Investor as a result of the sale to which such Buy-In relates. The Investor shall provide the Company written notice indicating the amounts payable to the Investor in respect of the Buy-In.

7.8 Subsequent Equity Sales; Registration Statements.

(a) From the date hereof until ninety (90) days after the Closing Date, without the consent of the Required Investors, neither the Company nor any Subsidiary shall issue shares of Common Stock or Common Stock Equivalents. Notwithstanding the foregoing, the provisions of this Section 7.8(a) shall not apply to (i) the issuance of the Securities, (ii) the issuance of Common Stock or Common Stock Equivalents upon the conversion or exercise of any securities of the Company or a Subsidiary outstanding on the date hereof, provided that the terms of such security are not amended after the date hereof to decrease the exercise price or increase the Common Stock or Common Stock Equivalents receivable upon the exercise, conversion or exchange thereof, (iii) the issuance of any Common Stock or Common Stock Equivalents pursuant to any Company equity incentive plan approved by the Company’s stockholders and in place as of the date

hereof, or (iv) the issuance of any Common Stock or Common Stock Equivalents pursuant to “at-the-market” offerings contemplated by the at-the-market issuance sale agreement in effect as of the Closing Date and described in the SEC Filings.

(b) From the date hereof until the earlier of (i) three years from the Closing Date or (ii) such time as no Investor holds any of the Securities, without the prior written consent of the Required Investors, the Company shall not effect or enter into an agreement to effect any “Variable Rate Transaction”. The term “Variable Rate Transaction” shall mean a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional shares of Common Stock either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into any agreement, including, but not limited to, an “at-the-market” offering or an equity line of credit, whereby the Company may sell securities at a future determined price, other than “at-the-market” offerings in effect as of the Closing Date and described in the SEC Filings. For the avoidance of doubt, the issuance of a security which is subject to customary anti-dilution protections, including where the conversion, exercise or exchange price is subject to adjustment as a result of stock splits, reverse stock splits and other similar recapitalization or reclassification events, shall not be deemed to be a “Variable Rate Transaction.”

(c) The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the 1933 Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the 1933 Act of the sale of the Securities to the Investors, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

(d) The Company shall not, from the date hereof until ninety (90) days after the Effective Date, prepare and file with the SEC a registration statement relating to an offering for its own account or the account of others under the 1933 Act of any of its equity securities, other than (i) a Registration Statement pursuant to Section 7.4 hereof or (ii) any registration statement or post-effective amendment to a registration statement (or supplement thereto) relating to the Company’s employee benefit plans registered on Form S-8 or, in connection with an acquisition, on Form S-4.

7.10 Equal Treatment of Investors. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration is also offered to all of the parties to the Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Investor by the Company and negotiated separately by each Investor, and is intended for the Company to treat the Investors as a class and shall not in any way be construed



as the Investors acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

7.11 Board Rights.

(a) If, at any time after the Closing Date, Richard S. Levy, M.D. ceases to be a member of the Board, the BBA Investors shall have the right (but not the obligation) to designate one (1) member of the Board (the “BBA Investor Designee”) for so long as the BBA Investors collectively hold at least 50% of the Preferred Shares (including Conversion Shares issued upon conversion thereof) purchased by the BBA Investors as of the Closing Date (the “BBA Board Designation Right”); provided, that such designee must qualify as an “independent” director as defined under Nasdaq Listing Rule 5605(a)(2), and such designee shall have provided the Nominating and Governance Committee of the Board (the “Nominating Committee”) such information as the Nominating Committee customarily requests pursuant to its charter as in effect on the date hereof to determine that such individual meets the independence requirements under Nasdaq Listing Rule 5605(a)(2), and is not otherwise disqualified by applicable Nasdaq Stock Market or SEC rules or regulations from service on the Board. The Company agrees to take all necessary corporate and other actions, including increasing the size of the Board, if necessary, and filling the resulting vacancy by vote of the Board and/or to request a vote of the shareholders of the Company, to permit the BBA Investor Designee to be appointed or elected by the members of the Board and/or shareholders, as applicable, pursuant to the Company’s Certificate of Incorporation and Bylaws. Within 90 days following the appointment or election of the BBA Investor Designee to the Board, the Company shall purchase and maintain director insurance on behalf of such BBA Investor Designee with the terms and conditions reasonably satisfactory to the BBA Investor Designee.

(b) In addition, during the period commencing on the Closing Date and continuing until such time as the BBA Investors exercise the BBA Board Designation Right, the BBA Investors shall have the right to designate one (1) individual to be present and participate in a non-voting capacity at all meetings of the Board or any committee thereof, including any telephonic meetings (such individual, the “BBA Board Observer”). Any materials that are sent by the Company to the members of the Board in their capacity as such shall be sent to the BBA Board Observer simultaneously by means reasonably designed to ensure timely receipt by the BBA Board Observer, and the Company will give the BBA Board Observer notice of such meetings, by the same means as such notices are delivered to the members of the Board and at the same time as notice is provided or delivered to the Board; provided, that the Board Observer agrees to hold in confidence and trust, to act in a fiduciary manner with respect to and not to disclose any information provided to or learned by the BBA Board Observer acting in such capacity, whether in connection with the BBA Board Observer’s attendance at meetings of the Board, in connection with the receipt of materials delivered to the Board or otherwise. Notwithstanding the provisions of this Section 7.11(b), the Company reserves the right to exclude the BBA Board Observer from any meeting of a committee of the Board for any reason whatsoever, to exclude the Board Observer from any meeting of the Board, or a portion thereof, and to redact portions of any materials delivered to the BBA Board Observer where and to the extent that the Company reasonably believes that withholding such information or excluding the BBA Board Observer from attending such meeting of the Board, or a portion thereof, is reasonably necessary: (i) to preserve attorney-client, work product or similar privilege between the Company and its counsel with respect to

any matter; (ii) to comply with the terms and conditions of confidentiality agreements between the Company and any third parties; or (iii) because the Board has determined that there exists, with respect to the subject of such deliberation or such information, an actual or potential conflict of interest between the BBA Investors and the Company. Further, the members of the Board shall be entitled to hold executive sessions which the BBA Board Observer may not be invited to attend. The BBA Board Observer shall use the same degree of care to protect the Company's confidential and proprietary information as the BBA Investors uses to protect their confidential and proprietary information of like nature, but in no circumstances with less than reasonable care.

For the avoidance of doubt, the Company acknowledges that, as of the date of this Agreement, Richard S. Levy, M.D. (i) has not been designated to the Board by the BBA Investors and (ii) does not serve on the Board on behalf of the BBA Investors. As of the date of this Agreement, the BBA Investors and Mr. Levy have no plans for Mr. Levy to serve on the Board on behalf of the BBA Investors, and the BBA Investors shall inform the Company if and when Mr. Levy were to do so.

#### 8. Survival and Indemnification.

8.1 Survival. The representations, warranties, covenants and agreements contained in this Agreement shall survive the Closing of the transactions contemplated by this Agreement.

8.2 Indemnification. The Company agrees to indemnify and hold harmless each Investor and its Affiliates and their respective directors, officers, trustees, partners, members, managers, employees and agents, and their respective successors and assigns, from and against any and all losses, claims, damages, liabilities and expenses (including without limitation reasonable attorney fees and disbursements and other expenses incurred in connection with investigating, preparing or defending any action, claim or proceeding, pending or threatened and the costs of enforcement thereof) (collectively, "Losses") to which such Person may become subject as a result of any breach of representation, warranty, covenant or agreement made by or to be performed on the part of the Company under the Transaction Documents, and will reimburse any such Person for all such amounts as they are incurred by such Person.

8.3 Conduct of Indemnification Proceedings. Any person entitled to indemnification hereunder shall (i) give prompt notice to the indemnifying party of any claim with respect to which it seeks indemnification and (ii) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (a) the indemnifying party has agreed to pay such fees or expenses, or (b) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such person or (c) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and provided, further, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same

jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation.

9. Miscellaneous.

9.1 Successors and Assigns. This Agreement may not be assigned by a party hereto without the prior written consent of the Company or the Investors, as applicable; provided, however, that an Investor may assign its rights and delegate its duties hereunder in whole or in part to an Affiliate or to a third party acquiring some or all of its Securities in a transaction complying with applicable securities laws without the prior written consent of the Company or the other Investors. The provisions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the parties. Without limiting the generality of the foregoing, in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder, the term "Company" shall be deemed to refer to such Person and the term "Shares" or "Preferred Shares" shall be deemed to refer to the securities received by the Investors in connection with such transaction. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

9.2 Counterparts; Faxes. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may be delivered by facsimile or other form of electronic transmission, which shall be deemed an original.

9.3 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

9.4 Notices. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given as hereinafter described (i) if given by personal delivery, then such notice shall be deemed given upon such delivery, (ii) if given by telex, telecopier or other electronic transmission, then such notice shall be deemed given upon receipt of confirmation of complete transmittal, (iii) if given by mail, then such notice shall be deemed given upon the earlier of (A) receipt of such notice by the recipient or (B) three days after such notice is deposited in first class mail, postage prepaid, and (iv) if given by an internationally recognized overnight air courier, then such notice shall be deemed given one Business Day after delivery to such carrier. All notices shall be addressed to the party to be notified at the address as follows, or at such other address as such party may designate by ten days' advance written notice to the other party:

If to the Company:

Four Tower Bridge  
200 Barr Harbor Drive, Suite 400  
West Conshohocken, Pennsylvania 19428  
Attention: Chief Executive Officer

With a copy to:

Stradling Yocca Carlson & Rauth, P.C.  
660 Newport Center Drive, Suite 1600  
Newport Beach, CA 92660  
Attention: Michael Lawhead  
Fax: (949) 823-5277  
Email: mlawhead@sycr.com

If to the Investors:

to the addresses set forth on the signature pages hereto.

9.5 Expenses. The parties hereto shall pay their own costs and expenses in connection herewith, except that the Company shall pay the fees and expenses of Goodwin Procter LLP not to exceed \$50,000, regardless of whether the transactions contemplated hereby are consummated; it being understood that (a) Goodwin Procter LLP has only rendered legal advice to the BBA Investors participating in this transaction and not to the Company or any other Investor in connection with the transactions contemplated hereby, and that each of the Company and each Investor has relied for such matters on the advice of its own respective counsel, and (b) except as otherwise set forth in this Section 9.5, the Company shall not be obligated to pay any other fees and expenses of the Investors, including without limitation the fees and expenses of counsel to any other Investors hereunder. Such expenses shall be paid at the Closing or, if the Closing does not occur, within five (5) Business Days of the termination of this Agreement. The Company shall reimburse the Investors upon demand for all reasonable out-of-pocket expenses incurred by the Investors, including without limitation reimbursement of attorneys' fees and disbursements, in connection with any amendment, modification or waiver of this Agreement or the other Transaction Documents requested by the Company. In the event that legal proceedings are commenced by any party to this Agreement against another party to this Agreement in connection with this Agreement or the other Transaction Documents, the party or parties which do not prevail in such proceedings shall severally, but not jointly, pay their pro rata share of the reasonable attorneys' fees and other reasonable out-of-pocket costs and expenses incurred by the prevailing party in such proceedings.

9.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Investors. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each holder of any Securities purchased under this Agreement at the time outstanding, each future holder of all such Securities, and the Company.

9.7 Publicity. Except as set forth below, no public release or announcement concerning the transactions contemplated hereby shall be issued by the Company or the Investors without the prior consent of the Company (in the case of a release or announcement by the Investors) or the

Investors (in the case of a release or announcement by the Company) (which consents shall not be unreasonably withheld), except as such release or announcement may be required by law or the applicable rules or regulations of any securities exchange or securities market, in which case the Company or the Investors, as the case may be, shall allow the Investors or the Company, as applicable, to the extent reasonably practicable in the circumstances, reasonable time to comment on such release or announcement in advance of such issuance. By 9:30 a.m. (New York City time) on the trading day immediately following the execution and delivery of this Agreement, the Company shall (i) issue a press release disclosing the execution of this Agreement and describing the transactions contemplated hereby and by the other Transaction Documents and (ii) file a Current Report on Form 8-K attaching the press release described in the foregoing sentence as well as copies of the Transaction Documents. In addition, the Company will make such other filings and notices in the manner and time required by the SEC or Nasdaq.

9.8 Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the parties hereby waive any provision of law which renders any provision hereof prohibited or unenforceable in any respect.

9.9 Entire Agreement. This Agreement, including the Exhibits, and the other Transaction Documents constitute the entire agreement among the parties hereof with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, both oral and written, between the parties with respect to the subject matter hereof and thereof.

9.10 Further Assurances. The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.

9.11 Construction. The parties agree that they and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto.

9.12 Governing Law; Consent to Jurisdiction; Waiver of Jury Trial. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of New York without regard to the choice of law principles thereof. Each of the parties hereto irrevocably submits to the exclusive jurisdiction of the courts of the State of New York located in New York County and the United States District Court for the Southern District of New York for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the transactions contemplated hereby. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement. Each of the parties hereto irrevocably consents to the jurisdiction of any such court in any such suit, action or proceeding and to the laying of venue in such court. Each party hereto irrevocably waives any objection to the laying of venue of any such suit, action or proceeding brought in such courts and irrevocably waives any claim that any such suit, action or proceeding brought in any such court

has been brought in an inconvenient forum. **EACH OF THE PARTIES HERETO WAIVES ANY RIGHT TO REQUEST A TRIAL BY JURY IN ANY LITIGATION WITH RESPECT TO THIS AGREEMENT AND THE OTHER TRANSACTION DOCUMENTS OR ARISING OUT OF THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY AND REPRESENTS THAT COUNSEL HAS BEEN CONSULTED SPECIFICALLY AS TO THIS WAIVER.**

9.13 Independent Nature of Investors' Obligations and Rights. The obligations of each Investor under any Transaction Document are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under any Transaction Document. The decision of each Investor to purchase Securities pursuant to the Transaction Documents has been made by such Investor independently of any other Investor. Nothing contained herein or in any Transaction Document, and no action taken by any Investor pursuant thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Investor acknowledges that no other Investor has acted as agent for such Investor in connection with making its investment hereunder and that no Investor will be acting as agent of such Investor in connection with monitoring its investment in the Securities or enforcing its rights under the Transaction Documents. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. The Company acknowledges that each of the Investors has been provided with the same Transaction Documents for the purpose of closing a transaction with multiple Investors and not because it was required or requested to do so by any Investor.

*[Signature Pages Follow]*

IN WITNESS WHEREOF, the parties have executed this Agreement or caused their duly authorized officers to execute this Agreement as of the date first above written.

COMPANY:

**MADRIGAL PHARMACEUTICALS, INC.**

By: /s/ Marc R. Schneebaum

Name: Marc R. Schneebaum

Title: Chief Financial Officer

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INVESTORS:

**667, L.P.**

BY: BAKER BROS. ADVISORS LP, management company and investment adviser to 667, L.P., pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner.

By: /s/ Scott Lessing

Scott Lessing

President

Address: Baker Bros. Advisors LP  
667 Madison Avenue, 21st Floor  
New York, N.Y. 10065  
Attention: Scott Lessing, President

**BAKER BROTHERS LIFE SCIENCES, L.P.**

BY: BAKER BROS. ADVISORS LP, management company and investment adviser to Baker Brothers Life Sciences, L.P., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner.

By: /s/ Scott Lessing

Scott Lessing

President

Address: Baker Bros. Advisors LP  
667 Madison Avenue, 21st Floor  
New York, N.Y. 10065  
Attention: Scott Lessing, President

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**ADAGE CAPITAL PARTNERS, L.P.,**  
a Delaware limited partnership

By: /s/ Dan Lehan  
Name: Dan Lehan  
Title: COO

Address: 200 Clarendon Street, 52<sup>nd</sup> Floor  
Boston, Massachusetts 02116  
Attention: Dan Lehan

**ROCK SPRINGS CAPITAL MASTER FUND LP**, a Cayman Islands  
exempted limited partnership

By: ROCK SPRINGS GENERAL PARTNER LLC, its General Partner

By: /s/ Mark Bussard  
Name: Mark Bussard  
Title: Managing Member

Address: 650 South Exeter Street, Suite 1070  
Baltimore, Maryland 21202  
Attention: General Counsel

**ARMISTICE CAPITAL MASTER FUND LTD.**, a Cayman Islands company

By: /s/ Anthony Cordone  
Name: Anthony Cordone  
Title: CFO of IM

Address: c/o Armistice Capital, LLC  
510 Madison Avenue, 22<sup>nd</sup> Floor  
New York, New York 10022  
Attention: Anthony Cordone

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**SCHEDULE OF INVESTORS**

<b>Investor Name</b>	<b>Number of Shares to be Purchased</b>	<b>Number of Preferred Shares to be Purchased</b>	<b>Aggregate Purchase Price</b>
667, L.P.	0	200,378	\$ 3,051,756.94
Baker Brothers Life Sciences, L.P.	0	1,769,419	\$ 26,948,251.37
Adage Capital Partners, L.P.	98,490	0	\$ 1,500,002.70
Armistice Capital Master Fund Ltd.	131,320	0	\$ 2,000,003.60
Rock Springs Capital Master Fund LP	98,490	0	\$ 1,500,002.70
<b>TOTAL:</b>	<b>328,300</b>	<b>1,969,797</b>	<b>\$ 35,000,017.31</b>

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**FORM OF CERTIFICATE OF DESIGNATION**

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**FORM OF AFFILIATE REGISTRATION RIGHTS AGREEMENT**

**REGISTRATION RIGHTS AGREEMENT**

This Registration Rights Agreement (this "Agreement") is made as of , , by and between Madrigal Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the persons listed on the attached Schedule A who are signatories to this Agreement (collectively, the "Investors"). Unless otherwise defined herein, capitalized terms used in this Agreement have the respective meanings ascribed to them in Section 1.

**RECITALS**

**WHEREAS**, the Company and the Investors wish to provide for certain arrangements with respect to the registration of the Registrable Securities (as defined below) by the Company under the Securities Act (as defined below).

**NOW, THEREFORE**, in consideration of the mutual promises and covenants set forth herein, and other consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

**Section 1  
Definitions**

1.1. Certain Definitions. In addition to the terms defined elsewhere in this Agreement, as used in this Agreement, the following terms have the respective meanings set forth below:

- (a) "Board" shall mean the Board of Directors of the Company.
  - (b) "Commission" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.
  - (c) "Common Stock" shall mean the common stock of the Company, par value \$0.0001 per share.
  - (d) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.
  - (e) "Other Securities" shall mean securities of the Company, other than Registrable Securities (as defined below), with respect to which registration rights have been granted by the Company from time to time.
  - (f) "Person" shall mean any individual, partnership, corporation, company, association, trust, joint venture, limited liability company, unincorporated organization, entity or division, or any government, governmental department or agency or political subdivision thereof.
  - (g) "Registrable Securities" shall mean shares of Common Stock and any Common Stock issuable upon the exercise or conversion of any other securities (whether equity, debt or otherwise) of the Company, including, but not limited to, the shares of Common Stock issued or issuable upon
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conversion of the Company's Series A Convertible Preferred Stock, now owned or hereafter acquired by any of the Investors.

(h) The terms "register," "registered" and "registration" shall refer to a registration effected by preparing and filing a Registration Statement in compliance with the Securities Act, and such Registration Statement becoming effective under the Securities Act.

(i) "Registration Expenses" shall mean all expenses incurred by the Company in effecting any registration pursuant to this Agreement, including, without limitation, all registration, qualification, and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company and up to \$50,000 of reasonable legal expenses of one special counsel for Investors (if different from the Company's counsel and if such counsel is reasonably approved by the Company) for underwritten public offerings, blue sky fees and expenses, and expenses of any regular or special audits incident to or required by any such registration, but shall not include Selling Expenses.

(j) "Registration Statement" means any registration statement of the Company filed with, or to be filed with, the Commission under the Securities Act, including the related prospectus, amendments and supplements to such registration statement, including pre- and post-effective amendments, and all exhibits and all material incorporated by reference in such registration statement as may be necessary to comply with applicable securities laws other than a registration statement (and related prospectus) filed on Form S-4 or Form S-8 or any successor forms thereto.

(k) "Rule 144" shall mean Rule 144 as promulgated by the Commission under the Securities Act, as such rule may be amended from time to time, or any similar successor rule that may be promulgated by the Commission.

(l) "Securities Act" shall mean the Securities Act of 1933, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.

(m) "Selling Expenses" shall mean all underwriting discounts and selling commissions applicable to the sale of Registrable Securities, the fees and expenses of any legal counsel and any other advisors any of the Investors engage and all similar fees and commissions relating to the Investors' disposition of the Registrable Securities.

(n) "Series A Convertible Preferred Stock" shall mean the Series A Convertible Preferred Stock, par value \$0.0001 per share, issued by the Company pursuant to the terms and conditions of that certain Securities Purchase Agreement dated as of June 20, 2017, by and among the Company and the parties signatory thereto.

## **Section 2 Resale Registration Rights**

### **2.1. Resale Registration Rights.**

(a) Following demand by any Investor, the Company shall file with the Commission a Registration Statement on Form S-3 (except if the Company is not then eligible to register for resale the Registrable Securities on Form S-3, in which case such registration shall be on another appropriate form in accordance with the Securities Act) covering the resale of the Registrable Securities by the Investors (the "Resale Registration Shelf"), and the Company shall file such Resale Registration Shelf as promptly as reasonably practicable following such demand, and in any event within sixty (60) days of

such demand. Such Resale Registration Shelf shall include a “final” prospectus, including the information required by Item 507 of Regulation S-K of the Securities Act, as provided by the Investors in accordance with Section 2.7. Notwithstanding the foregoing, before filing the Resale Registration Shelf, the Company shall furnish to the Investors a copy of the Resale Registration Shelf and afford the Investors an opportunity to review and comment on the Resale Registration Shelf. The Company’s obligation pursuant to this Section 2.1(a) is conditioned upon the Investors providing the information contemplated in Section 2.7.

(b) The Company shall use its reasonable best efforts to cause the Resale Registration Shelf and related prospectuses to become effective as promptly as practicable after filing. The Company shall use its reasonable best efforts to cause such Registration Statement to remain effective under the Securities Act until the earlier of the date (i) all Registrable Securities covered by the Resale Registration Shelf have been sold or may be sold freely without limitations or restrictions as to volume or manner of sale pursuant to Rule 144 or (ii) all Registrable Securities covered by the Resale Registration Shelf otherwise cease to be Registrable Securities pursuant to Section 2.9 hereof. The Company shall promptly, and within two (2) business days after the Company confirms effectiveness of the Resale Registration Shelf with the Commission, notify the Investors of the effectiveness of the Resale Registration Shelf.

(c) Notwithstanding anything contained herein to the contrary, the Company shall not be obligated to effect, or to take any action to effect, a registration pursuant to Section 2.1(a):

(i) if the Company has and maintains an effective Registration Statement on Form S-3ASR that provides for the resale of an unlimited number of securities by selling stockholders (a “Company Registration Shelf”); or

(ii) during the period forty-five (45) days prior to the Company’s good faith estimate of the date of filing of a Company Registration Shelf; or

(iii) if the Company has caused a Registration Statement to become effective pursuant to this Section 2.1 during the prior twelve (12) month period.

(d) If the Company has a Company Registration Shelf in place at any time in which the Investors make a demand pursuant to Section 2.1(a), the Company shall file with the Commission, as promptly as practicable, and in any event within fifteen (15) business days after such demand, a “final” prospectus supplement to its Company Registration Shelf covering the resale of the Registrable Securities by the Investors (the “Prospectus”); provided, however, that the Company shall not be obligated to file more than one Prospectus pursuant to this Section 2.1(d) in any six month period to add additional Registrable Securities to the Company Registration Shelf that were acquired by the Investors other than directly from the Company or in an underwritten public offering by the Company. The Prospectus shall include the information required under Item 507 of Regulation S-K of the Securities Act, which information shall be provided by the Investors in accordance with Section 2.7. Notwithstanding the foregoing, before filing the Prospectus, the Company shall furnish to the Investors a copy of the Prospectus and afford the Investors an opportunity to review and comment on the Prospectus. The Company’s obligation pursuant to this Section 2.1(d) is conditioned upon the Investors providing the information contemplated in Section 2.7.

(e) Deferral and Suspension. At any time after being obligated to file a Resale Registration Shelf or Prospectus, or after any Resale Registration Shelf has become effective or a Prospectus filed with the Commission, the Company may defer the filing of or suspend the use of any such Resale Registration Shelf or Prospectus, upon giving written notice of such action to the Investors



with a certificate signed by the Principal Executive Officer of the Company stating that in the good faith judgment of the Board, the filing or use of any such Resale Registration Shelf or Prospectus covering the Registrable Securities would be seriously detrimental to the Company or its stockholders at such time and that the Board concludes, as a result, that it is in the best interests of the Company and its stockholders to defer the filing or suspend the use of such Resale Registration Shelf or Prospectus at such time. The Company shall have the right to defer the filing of or suspend the use of such Resale Registration Shelf or Prospectus for a period of not more than one hundred twenty (120) days from the date the Company notifies the Investors of such deferral or suspension; provided that the Company shall not exercise the right contained in this Section 2.1(e) more than once in any twelve month period. In the case of the suspension of use of any effective Resale Registration Shelf or Prospectus, the Investors, immediately upon receipt of notice thereof from the Company, shall discontinue any offers or sales of Registrable Securities pursuant to such Resale Registration Shelf or Prospectus until advised in writing by the Company that the use of such Resale Registration Shelf or Prospectus may be resumed. In the case of a deferred Prospectus or Resale Registration Shelf filing, the Company shall provide prompt written notice to the Investors of (i) the Company's decision to file or seek effectiveness of the Prospectus or Resale Registration Shelf, as the case may be, following such deferral and (ii) in the case of a Resale Registration Shelf, the effectiveness of such Resale Registration Shelf. In the case of either a suspension of use of, or deferred filing of, any Resale Registration Shelf or Prospectus, the Company shall not, during the pendency of such suspension or deferral, be required to take any action hereunder (including any action pursuant to Section 2.2 hereof) with respect to the registration or sale of any Registrable Securities pursuant to any such Resale Registration Shelf, Company Registration Shelf or Prospectus.

(f) Other Securities. Subject to Section 2.2(e) below, any Resale Registration Shelf or Prospectus may include Other Securities, and may include securities of the Company being sold for the account of the Company; provided such Other Securities are excluded first from such Registration Statement in order to comply with any applicable laws or request from any Government Entity, Nasdaq or any applicable listing agency. For the avoidance of doubt, no Other Securities may be included in an underwritten offering pursuant to Section 2.2 without the consent of the Investors.

## 2.2. Sales and Underwritten Offerings of the Registrable Securities.

(a) Notwithstanding any provision contained herein to the contrary, the Investors, collectively, shall, subject to the limitations set forth in this Section 2.2, be permitted one underwritten public offering per calendar year, but no more than three underwritten public offerings in total, to effect the sale or distribution of Registrable Securities.

(b) If the Investors intend to effect an underwritten public offering pursuant to a Resale Registration Shelf or Company Registration Shelf to sell or otherwise distribute Registrable Securities, they shall so advise the Company and provide as much notice to the Company as reasonably practicable (and in any event not less than fifteen (15) business days prior to the Investors' request that the Company file a prospectus supplement to a Resale Registration Shelf or Company Registration Shelf).

(c) In connection with any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities, the Investors shall be entitled to select the underwriter or underwriters for such offering, subject to the consent of the Company, such consent not to be unreasonably withheld, conditioned or delayed.

(d) In connection with any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities, the Company shall not be required to include any of the Registrable Securities in such underwriting unless the Investors (i) enter into an underwriting agreement in customary form with the underwriter or underwriters, (ii) accept customary

terms in such underwriting agreement with regard to representations and warranties relating to ownership of the Registrable Securities and authority and power to enter into such underwriting agreement and (iii) complete and execute all questionnaires, powers of attorney, custody agreements, indemnities and other documents as may be requested by such underwriter or underwriters. Further, the Company shall not be required to include any of the Registrable Securities in such underwriting if (Y) the underwriting agreement proposed by the underwriter or underwriters contains representations, warranties or conditions that are not reasonable in light of the Company's then-current business or (Z) the underwriter, underwriters or the Investors require the Company to participate in any marketing, road show or comparable activity that may be required to complete the orderly sale of shares by the underwriter or underwriters.

(e) If the total amount of securities to be sold in any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities exceeds the amount that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities (subject in each case to the cutback provisions set forth in this Section 2.2(e)), that the underwriters and the Company determine in their sole discretion shall not jeopardize the success of the offering. If the underwritten public offering has been requested pursuant to Section 2.2(a) hereof, the number of shares that are entitled to be included in the registration and underwriting shall be allocated in the following manner: (a) first, shares of Company equity securities that the Company desires to include in such registration shall be excluded and (b) second, Registrable Securities requested to be included in such registration by the Investors shall be excluded. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round down the number of shares allocated to any of the Investors to the nearest 100 shares.

2.3. Fees and Expenses. Except as otherwise may be agreed upon between the Investors and the Company, all Registration Expenses incurred in connection with registrations pursuant to this Agreement shall be borne by the Company. All Selling Expenses relating to securities registered on behalf of the Investors shall be borne by the Investors.

2.4. Registration Procedures. In the case of each registration of Registrable Securities effected by the Company pursuant to Section 2.1 hereof, the Company shall keep the Investors advised as to the initiation of each such registration and as to the status thereof. The Company shall use its reasonable best efforts, within the limits set forth in this Section 2.4, to:

(a) prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectuses used in connection with such Registration Statement as may be necessary to keep such Registration Statement effective and current and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such Registration Statement;

(b) furnish to the Investors such numbers of copies of a prospectus, including preliminary prospectuses, in conformity with the requirements of the Securities Act, and such other documents as the Investors may reasonably request in order to facilitate the disposition of Registrable Securities;

(c) use its reasonable best efforts to register and qualify the Registrable Securities covered by such Registration Statement under such other securities or blue sky laws of such jurisdictions in the United States as shall be reasonably requested by the Investors, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions;

(d) in the event of any underwritten public offering, and subject to Section 2.2(d), enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering and take such other usual and customary action as the Investors may reasonably request in order to facilitate the disposition of such Registrable Securities;

(e) notify the Investors at any time when a prospectus relating to a Registration Statement covering any Registrable Securities is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing. The Company shall use its reasonable best efforts to amend or supplement such prospectus in order to cause such prospectus not to include any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing;

(f) provide a transfer agent and registrar for all Registrable Securities registered pursuant to such Registration Statement and, if required, a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(g) if requested by an Investor, use reasonable best efforts to cause the Company's transfer agent to remove any restrictive legend from any Registrable Securities being transferred by an Investor pursuant to a Resale Registration Shelf or Company Registration Shelf, within two business days following such request;

(h) cause to be furnished, at the request of the Investors, on the date that Registrable Securities are delivered to underwriters for sale in connection with an underwritten offering pursuant to this Agreement, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, and (ii) a letter or letters from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters; and

(i) cause all such Registrable Securities included in a Registration Statement pursuant to this Agreement to be listed on each securities exchange or other securities trading markets on which Common Stock is then listed.

#### 2.5. The Investors Obligations.

(a) Discontinuance of Distribution. The Investors agree that, upon receipt of any notice from the Company of the occurrence of any event of the kind described in Section 2.4(e) hereof, the Investors shall immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until the Investors' receipt of the copies of the supplemented or amended prospectus contemplated by Section 2.4(e) hereof or receipt of notice that no supplement or amendment is required and that the Investors' disposition of the Registrable Securities may be resumed. The Company may provide appropriate stop orders to enforce the provisions of this Section 2.5(a).

(b) Compliance with Prospectus Delivery Requirements. The Investors covenant and agree that they shall comply with the prospectus delivery requirements of the Securities Act as applicable

to them or an exemption therefrom in connection with sales of Registrable Securities pursuant to any Registration Statement filed by the Company pursuant to this Agreement.

(c) Notification of Sale of Registrable Securities. The Investors covenant and agree that they shall notify the Company following the sale of Registrable Securities to a third party as promptly as reasonably practicable, and in any event within thirty (30) days, following the sale of such Registrable Securities.

## 2.6. Indemnification.

(a) To the extent permitted by law, the Company shall indemnify the Investors, and, as applicable, their officers, directors, and constituent partners, legal counsel for each Investor and each Person controlling the Investors, with respect to which registration, related qualification, or related compliance of Registrable Securities has been effected pursuant to this Agreement, and each underwriter, if any, and each Person who controls any underwriter within the meaning of the Securities Act against all claims, losses, damages, or liabilities (or actions in respect thereof) to the extent such claims, losses, damages, or liabilities arise out of or are based upon (i) any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus or other document (including any related Registration Statement) incident to any such registration, qualification, or compliance, or (ii) any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, qualification, or compliance; and the Company shall pay as incurred to the Investors, each such underwriter, and each Person who controls the Investors or underwriter, any legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability, or action; provided, however, that the indemnity contained in this Section 2.6(a) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability, or action if settlement is effected without the consent of the Company (which consent shall not unreasonably be withheld); and provided, further, that the Company shall not be liable in any such case to the extent that any such claim, loss, damage, liability, or expense arises out of or is based upon any violation by such Investor of the obligations set forth in Section 2.5 hereof or any untrue statement or omission contained in such prospectus or other document based upon written information furnished to the Company by the Investors, such underwriter, or such controlling Person and stated to be for use therein.

(b) To the extent permitted by law, each Investor (severally and not jointly) shall, if Registrable Securities held by such Investor are included for sale in the registration and related qualification and compliance effected pursuant to this Agreement, indemnify the Company, each of its directors, each officer of the Company who signs the applicable Registration Statement, each legal counsel and each underwriter of the Company's securities covered by such a Registration Statement, each Person who controls the Company or such underwriter within the meaning of the Securities Act against all claims, losses, damages, and liabilities (or actions in respect thereof) arising out of or based upon (i) any untrue statement (or alleged untrue statement) of a material fact contained in any such Registration Statement, or related document, or (ii) any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by such Investor of Section 2.5 hereof, the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law applicable to such Investor and relating to action or inaction required of such Investor in connection with any such registration and related qualification and compliance, and shall pay as incurred to such persons, any legal and any other expenses reasonably

incurred in connection with investigating or defending any such claim, loss, damage, liability, or action, in each case only to the extent that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in (and such violation pertains to) such Registration Statement or related document in reliance upon and in conformity with written information furnished to the Company by such Investor and stated to be specifically for use therein; provided, however, that the indemnity contained in this Section 2.6(b) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability, or action if settlement is effected without the consent of such Investor (which consent shall not unreasonably be withheld); provided, further, that such Investor's liability under this Section 2.6(b) (when combined with any amounts such Investor is liable for under Section 2.6(d)) shall not exceed such Investor's net proceeds from the offering of securities made in connection with such registration.

(c) Promptly after receipt by an indemnified party under this Section 2.6 of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party under this Section 2.6, notify the indemnifying party in writing of the commencement thereof and generally summarize such action. The indemnifying party shall have the right to participate in and to assume the defense of such claim; provided, however, that the indemnifying party shall be entitled to select counsel for the defense of such claim with the approval of any parties entitled to indemnification, which approval shall not be unreasonably withheld; provided further, however, that if either party reasonably determines that there may be a conflict between the position of the Company and the Investors in conducting the defense of such action, suit, or proceeding by reason of recognized claims for indemnity under this Section 2.6, then counsel for such party shall be entitled to conduct the defense to the extent reasonably determined by such counsel to be necessary to protect the interest of such party. The failure to notify an indemnifying party promptly of the commencement of any such action, if prejudicial to the ability of the indemnifying party to defend such action, shall relieve such indemnifying party, to the extent so prejudiced, of any liability to the indemnified party under this Section 2.6, but the omission so to notify the indemnifying party shall not relieve such party of any liability that such party may have to any indemnified party otherwise than under this Section 2.6.

(d) If the indemnification provided for in this Section 2.6 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage, or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission. In no event, however, shall (i) any amount due for contribution hereunder be in excess of the amount that would otherwise be due under Section 2.6(a) or Section 2.6(b), as applicable, based on the limitations of such provisions and (ii) a Person guilty of fraudulent misrepresentation (within the meaning of the Securities Act) be entitled to contribution from a Person who was not guilty of such fraudulent misrepresentation.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with an underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control; provided, however, that the failure of the underwriting agreement to provide for or address a matter provided for or addressed by the foregoing provisions shall not be a conflict between the underwriting agreement and the foregoing provisions.

(f) The obligations of the Company and the Investors under this Section 2.6 shall survive the completion of any offering of Registrable Securities in a Registration Statement under this Agreement or otherwise.

2.7. Information. The Investors shall furnish to the Company such information regarding the Investors and the distribution proposed by the Investors as the Company may reasonably request and as shall be reasonably required in connection with any registration referred to in this Agreement. The Investors agree to, as promptly as practicable (and in any event prior to any sales made pursuant to a prospectus), furnish to the Company all information required to be disclosed in order to make the information previously furnished to the Company by the Investors not misleading. The Investors agree to keep confidential the receipt of any notice received pursuant to Section 2.4(e) and the contents thereof, except as required pursuant to applicable law. Notwithstanding anything to the contrary herein, the Company shall be under no obligation to name the Investors in any Registration Statement if the Investors have not provided the information required by this Section 2.7 with respect to the Investors as a selling securityholder in such Registration Statement or any related prospectus.

2.8. Rule 144 Requirements. With a view to making available to the Investors the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the Commission that may at any time permit the Investors to sell Registrable Securities to the public without registration, the Company agrees to use its reasonable best efforts to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act at all times after the date hereof;

(b) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act;

(c) prior to the filing of the Registration Statement or any amendment thereto (whether pre-effective or post-effective), and prior to the filing of any prospectus or prospectus supplement related thereto, to provide the Investors with copies of all of the pages thereof (if any) that reference the Investors; and

(d) furnish to any Investor, so long as the Investor owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested by an Investor in availing itself of any rule or regulation of the Commission which permits an Investor to sell any such securities without registration.

2.9. Termination of Status as Registrable Securities. The Registrable Securities shall cease to be Registrable Securities upon the earliest to occur of the following events: (i) such Registrable Securities have been sold pursuant to an effective Registration Statement; (ii) such Registrable Securities have been sold by the Investors pursuant to Rule 144 (or other similar rule), (iii) such Registrable Securities may be resold by the Investor holding such Registrable Securities without limitations as to volume or manner of sale pursuant to Rule 144; or (iv) ten (10) years after the date of this Agreement.

**Section 4**  
**Miscellaneous**

3.1. Amendment. No amendment, alteration or modification of any of the provisions of this Agreement shall be binding unless made in writing and signed by each of the Company and the Investors.

3.2. Injunctive Relief. It is hereby agreed and acknowledged that it shall be impossible to measure in money the damages that would be suffered if the parties fail to comply with any of the obligations herein imposed on them and that in the event of any such failure, an aggrieved Person shall be irreparably damaged and shall not have an adequate remedy at law. Any such Person shall, therefore, be entitled (in addition to any other remedy to which it may be entitled in law or in equity) to injunctive relief, including, without limitation, specific performance, to enforce such obligations, and if any action should be brought in equity to enforce any of the provisions of this Agreement, none of the parties hereto shall raise the defense that there is an adequate remedy at law.

3.3. Notices. All notices required or permitted under this Agreement must be in writing and sent to the address or facsimile number identified below. Notices must be given: (a) by personal delivery, with receipt acknowledged; (b) by facsimile followed by hard copy delivered by the methods under clause (c) or (d); (c) by prepaid certified or registered mail, return receipt requested; or (d) by prepaid reputable overnight delivery service. Notices shall be effective upon receipt. Either party may change its notice address by providing the other party written notice of such change. Notices shall be delivered as follows:

If to the Investors:                   At such Investor's address as set forth on Schedule A hereto.

If to the Company:                   Four Tower Bridge  
200 Barr Harbor Drive, Suite 400  
West Conshohocken, Pennsylvania 19428  
Attention: Chief Executive Officer

3.4. Governing Law; Jurisdiction; Venue; Jury Trial.

(a) This Agreement shall be governed by, and construed in accordance with, the law of the State of New York without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York.

(b) Each of the Company and the Investors irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of the courts of the State of New York sitting in the Borough of Manhattan, New York and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement and the transactions contemplated herein, or for recognition or enforcement of any judgment, and each of the Company and the Investors irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York state court or, to the fullest extent permitted by applicable law, in such federal court. Each of the Company and the Investors hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(c) Each of the Company and the Investors irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising out of or relating to this Agreement and the transactions contemplated herein in any court referred to in Section 3.4(b) hereof. Each of the Company and the Investors hereby irrevocably waives, to the fullest extent permitted by applicable law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(d) EACH OF THE COMPANY AND THE INVESTORS HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH OF THE COMPANY AND THE INVESTORS (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT EACH OF THE COMPANY AND THE INVESTORS HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

3.5. Successors, Assigns and Transferees. Any and all rights, duties and obligations hereunder shall not be assigned, transferred, delegated or sublicensed by any party hereto without the prior written consent of the other party; provided, however, that the Investors shall be entitled to transfer Registrable Securities to one or more of their affiliates and, solely in connection therewith, may assign their rights hereunder in respect of such transferred Registrable Securities, in each case, so long as such Investor is not relieved of any liability or obligations hereunder, without the prior consent of the Company. Any transfer or assignment made other than as provided in the first sentence of this Section 3.5 shall be null and void. Subject to the foregoing and except as otherwise provided herein, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

3.6. Entire Agreement. This Agreement, together with any exhibits hereto, constitute the entire agreement between the parties relating to the subject matter hereof and all previous agreements or arrangements between the parties, written or oral, relating to the subject matter hereof are superseded.

3.7. Waiver. No failure on the part of either party hereto to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of either party hereto in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver thereof; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

3.8. Severability. If any part of this Agreement is declared invalid or unenforceable by any court of competent jurisdiction, such declaration shall not affect the remainder of the Agreement and the invalidated provision shall be revised in a manner that shall render such provision valid while preserving the parties' original intent to the maximum extent possible.

3.9. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement. All references in this Agreement to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

3.10. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties that execute such counterparts (including by facsimile or other electronic means), and all of which together shall constitute one instrument.

3.11. Term and Termination. The Investors' rights to demand the registration of the Registrable Securities under this Agreement, as well as the Company's obligations under Section 2.2



hereof, shall terminate automatically once all Registrable Securities cease to be Registrable Securities pursuant to the terms of Section 2.9 of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Registration Rights Agreement effective as of the day, month and year first above written.

**MADRIGAL PHARMACEUTICALS, INC.**  
a Delaware Corporation

By:  
Name:  
Title:

\_\_\_\_\_

[Signature Page to Registration Rights Agreement]

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**667, L.P.**

BY: BAKER BROS. ADVISORS LP, management company and investment adviser to 667, L.P., pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner.

By: \_\_\_\_\_  
Scott Lessing  
President

**BAKER BROTHERS LIFE SCIENCES, L.P.**

By: BAKER BROS. ADVISORS LP, management company and investment adviser to Baker Brothers Life Sciences, L.P., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner.

By: \_\_\_\_\_  
Scott Lessing  
President

[Signature Page to Registration Rights Agreement]

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**Schedule A**

**The Investors**

667, L.P.

Baker Brothers Life Sciences, L.P.

To the above Investors:

Baker Bros. Advisors LP  
667 Madison Avenue, 21st Floor

New York, N.Y. 10065  
Attention: Scott Lessing, President

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NOT FOR IMMEDIATE RELEASE

### **Madrigal Pharmaceuticals Announces \$35 Million Private Placement Offering**

West Conshohocken, PA — June 21, 2017 — Madrigal Pharmaceuticals, Inc. (NASDAQ: MDGL) today announced that it has entered into a definitive securities purchase agreement with a group of institutional accredited investors for the private placement offering of approximately 328,300 shares of its common stock and approximately 1.97 million shares of its Series A Convertible Preferred Stock. The institutional investors participating in the private placement consist of a core group of existing, non-controlling stockholders of Madrigal.

For each share of common stock and each share of Series A Convertible Preferred Stock, the investors agreed to pay a negotiated purchase price of \$15.23, resulting in gross proceeds to Madrigal, before deducting estimated offering expenses, of approximately \$35 million. The private placement is expected to close on or about June 23, 2017, subject to customary closing conditions.

Madrigal expects to use the proceeds from the offering primarily to support the ongoing clinical development of its lead compound, MGL-3196, a first-in-class, oral, once-daily, liver-directed, thyroid hormone receptor (THR)  $\beta$ -selective agonist. MGL-3196 is being developed as a treatment for patients with non-alcoholic steatohepatitis (NASH) and heterozygous familial hypercholesterolemia (HeFH). Madrigal recently reported that, following a prescheduled Data Safety Monitoring Board (DSMB) meeting to review data from Madrigal's Phase 2 NASH clinical trial, the DSMB issued a positive recommendation for the continuation of the clinical trial with no changes to the protocol. Madrigal expects top-line results from two Phase 2 proof-of-concept trials by year-end.

"This additional capital and expanded support from our institutional shareholders reinforces our belief that MGL-3196 has the potential to safely and effectively address the serious unmet medical needs of patients with NASH as well as those with HeFH," stated Paul A. Friedman, M.D., Chief Executive Officer of Madrigal. "Further, with the Phase 2 data expected by year-end, we are well-positioned to move MGL-3196 forward in an appropriate and expeditious manner."

The Series A Convertible Preferred Stock is non-voting. Each share of Series A Convertible Preferred Stock is convertible into one share of Madrigal's common stock, provided that conversion will be prohibited if, as a result, the holder and its affiliates would beneficially own more than 4.99% of the total number of shares of Madrigal's common stock or any other class of any equity security (other than an exempted security) that is registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, which may be increased or decreased to any other percentage at the holder's election on 61 days' notice delivered to Madrigal.

The securities offered and to be sold by Madrigal in this private placement have not been registered under the Securities Act of 1933, as amended, or state securities laws and may not be offered or sold in the United States absent registration with the Securities and Exchange Commission ("SEC") or an applicable exemption from registration requirements. Madrigal has agreed to file a registration

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statement with the SEC covering the resale of the shares of common stock issued in the private placement.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state.

#### **About Madrigal Pharmaceuticals**

Madrigal Pharmaceuticals, Inc. (Nasdaq: MGDJ) is a clinical-stage biopharmaceutical company pursuing novel therapeutics that target a specific thyroid hormone receptor pathway in the liver, which is a key regulatory mechanism common to a spectrum of cardio-metabolic and fatty liver diseases with high unmet medical need. The company's lead candidate, MGL-3196, is a first-in-class, orally administered, small-molecule, liver-directed, thyroid hormone receptor (THR)  $\beta$ -selective agonist that is currently in Phase 2 development for NASH and HeFH. For more information, visit [www.madrigalpharma.com](http://www.madrigalpharma.com).

#### **Forward-Looking Statements**

*This communication contains "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current knowledge, assumptions, judgment and expectations regarding future performance or events. Although management believes that the expectations reflected in such statements are reasonable, they give no assurance that such expectations will prove to be correct and you should be aware that actual results could differ materially from those contained in the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties including, but not limited to, the company's clinical development of MGL-3196, the timing and outcomes of clinical studies of MGL-3196, and the uncertainties inherent in clinical testing. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. Madrigal undertakes no obligation to update any forward looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events. Please refer to Madrigal's filings with the U.S. Securities and Exchange Commission for more detailed information regarding these risks and uncertainties and other factors that may cause actual results to differ materially from those expressed or implied.*

#### **Investor Contact:**

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#### **Media Contact:**

Mike Beyer, Sam Brown Inc.  
[mikebeyer@sambrown.com](mailto:mikebeyer@sambrown.com)  
312-961-2502

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