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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 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): August 21, 2017**

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**ALTIMMUNE, INC.**  
(Exact name of registrant as specified in its charter)

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

**001-32587**  
(Commission  
File Number)

**20-2726770**  
(IRS Employer  
Identification No.)

**19 Firstfield Road, Suite 200**  
**Gaithersburg, Maryland**  
(Address of principal executive offices)

**20878**  
(Zip Code)

**Registrant's telephone number including area code: (240) 654-1450**

(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 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

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.**

On August 21, 2017, Altimmune, Inc. (the “Company”) closed its previously announced offering of 15,655,714 shares of the Company’s Series B Convertible Preferred Stock, par value \$0.0001 per share (the “Preferred Stock”) which are initially convertible into an aggregate of 5,863,564 shares of Common Stock (without regard to any limitation on conversion set forth in the Certificate of Designations (as defined below)) at an initial conversion price of \$2.67 per share of Common Stock, and Warrants initially exercisable to purchase an aggregate of 2,345,427 shares of Common Stock (without regard to any limitation on exercise set forth in the Warrants) at an initial exercise price of \$2.67 per share of Common Stock, all upon the terms and conditions set forth in the securities purchase agreement, dated August 16, 2017, by and between the Company and the investors party thereto (the “Securities Purchase Agreement”), for an aggregate offering price of \$14.7 million (the “Offering”). Each Warrant is immediately exercisable and will expire on August 15, 2022. On August 21, 2017, the Company filed the Certificate of Designations, Preferences and Rights of Series B Convertible Preferred Stock of the Company (the “Certificate of Designations”) with respect to the Preferred Stock with the Secretary of the State of Delaware to establish the preferences, limitations and relative rights of the Preferred Stock.

Piper Jaffray & Co. acted as placement agent in connection with the Offering pursuant to the previously announced Placement Agency Agreement, dated August 16, 2017 (the “Placement Agency Agreement”). We received approximately \$13.0 in net proceeds from the Offering, after deducting the placement agent fee, an additional fee related to our completed merger paid to the placement agent, and our estimated offering expenses. If a Warrant holder elects to exercise the Warrants issued in the Offering by paying the exercise price in cash, we would also receive proceeds from the exercise of the Warrants. The Offering was conducted pursuant to the Company’s existing shelf registration statement on Form S-3 (File No. 333-217034), which was filed with the U.S. Securities and Exchange Commission (the “Commission”) on March 30, 2017 and declared effective by the Commission on April 6, 2017.

The terms of the Placement Agency Agreement, the Securities Purchase Agreement, the Certificate of Designations, and the Form of Warrant are discussed in more detail in Item 1.01 of the Company’s Current Report on Form 8-K filed on August 17, 2017, and such description is incorporated by reference herein, and the description of the Placement Agency Agreement, the Securities Purchase Agreement, the Certificate of Designations, and the Form of Warrant included in this Current Report on Form 8-K and incorporated by reference herein does not purport to be complete. The foregoing description is qualified in its entirety by reference to the Placement Agency Agreement, the Securities Purchase Agreement, the Certificate of Designations, and the Form of Warrant, which are filed as Exhibits 1.1, 2.1, 3.1, and 4.1, respectively, to this Current Report on Form 8-K and incorporated herein by reference.

**Item 3.03 Material Modification to Rights of Security Holders.**

On August 21, 2017, the Company filed the Certificate of Designations with the Secretary of the State of Delaware to establish the preferences, limitations and relative rights of the Preferred Stock. The Certificate of Designations became effective upon filing, and a copy is filed as Exhibit 3.1 hereto, and is incorporated herein by reference.

In the event of our liquidation, dissolution, or winding up, prior to distribution to holders of securities ranking junior to the Preferred Stock, holders of Preferred Stock will be entitled to receive the amount of cash, securities or other property equal to the then stated value of the Preferred Stock.

The holders of Preferred Stock shall be entitled to receive dividends if and when declared by the Board of Directors of the Company. For so long as any shares of Preferred Stock are outstanding, the Board may not declare and pay any dividends on any securities ranking junior to or pari passu with the Preferred Stock unless the holders of Preferred Stock receive a dividend on a pro rata basis equal to the amount such holders would receive in such dividend if the Preferred Stock were converted to Common Stock immediately prior to such dividend.

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

On August 21, 2017, the Company filed the Certificate of Designations with the Secretary of the State of Delaware to establish the preferences, limitations and relative rights of the Preferred Stock. The Certificate of Designations became effective upon filing, and a copy is filed as Exhibit 3.1 hereto, and is incorporated herein by reference. The descriptions of the terms of the Preferred Stock set forth in the Certificate of Designations set forth in Item 1.01 above, and in Item 1.01 of the Company’s Current Report on Form 8-K filed on August 17, 2017, is incorporated by reference into this Item 5.03.

**Item 8.01. Other Events.**

On August 21, 2017, the Company issued a press release announcing it has closed the Offering. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
1.1	Placement Agency Agreement between Altimmune, Inc. and Piper Jaffray & Co. (incorporated by reference to Exhibit 1.1 of the Company's Current Report on Form 8-K filed on August 17, 2017)
2.1	Securities Purchase Agreement between Altimmune, Inc. and the purchasers named therein (incorporated by reference to the Exhibit 2.1 of the Company's Current Report on Form 8-K filed on August 17, 2017) (certain exhibits and schedules have been omitted, and the Company agrees to furnish supplementally to the Commission a copy of any omitted exhibits and schedules upon request)
3.1	Certificate of Designations of the Preferred Stock, filed with the Secretary of State of the State of Delaware on August 21, 2017
4.1	Form of Warrant (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on August 17, 2017)
5.1	Opinion of Proskauer Rose LLP
23.1	Consent of Proskauer Rose LLP (contained in Exhibit 5.1 above)
99.1	Press Release, dated August 21, 2017

**SIGNATURE**

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

**ALTIMMUNE, INC.**

By: /s/ William Enright

Name: William Enright

Title: President and Chief Executive Officer

Dated August 21, 2017

## EXHIBIT INDEX

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**CERTIFICATE OF DESIGNATIONS, PREFERENCES  
AND RIGHTS OF SERIES B CONVERTIBLE PREFERRED STOCK  
OF  
ALTIMMUNE, INC.**

Altimune, Inc. (the “**Company**”), a corporation organized and existing under the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify that, pursuant to authority conferred upon the Board of Directors of the Company (the “**Board**”) by the Certificate of Incorporation, as amended, of the Company, and pursuant to the provisions of the DGCL, the Board adopted resolutions (i) designating a series of the Company’s previously authorized preferred stock, par value \$0.0001 per share, and (ii) providing for the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, of sixteen thousand (16,000) shares of Series B Convertible Preferred Stock of the Company, as follows:

RESOLVED, that the Company is authorized to issue sixteen thousand (16,000) shares of Series B Convertible Preferred Stock, par value \$0.0001 per share (the “**Series B Preferred Shares**”), which shall have the following powers, designations, preferences and other special rights:

(1) Ranking. The Series B Preferred Shares shall rank prior and superior to all of the Common Stock and any other capital stock of the Company with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The rights of the shares of Common Stock and other capital stock of the Company shall be of junior rank to and subject to the preferences and relative rights of the Series B Preferred Shares.

(2) Payments of Stated Value; Prepayment. On each Installment Date, the Company shall pay to each Holder an amount equal to the Installment Amount due on such Installment Date in accordance with Section 9. If any Series B Preferred Shares remain outstanding on the Maturity Date after giving effect to any Company Conversions and Company Redemptions occurring on such date in accordance with Section 9, the Company shall redeem such Series B Preferred Shares in cash in an amount equal to the Conversion Amount for each such Series B Preferred Share. The “**Maturity Date**” shall be August 16, 2018, as may be extended at the option of each Holder (i) in the event that, and for so long as, a Triggering Event of a type set forth in Sections 6(a)(i), (ii), (iii), (iv), (v), (xii) or (xiii) shall have occurred and be continuing on the Maturity Date (as may be extended pursuant to this Section 2) through the date that is ten (10) Trading Days after the curing of any such Triggering Event, and (ii) through the date that is ten (10) Business Days after the consummation of a Change of Control in the event that a Change of Control is publicly announced or a Change of Control Notice (as defined in Section 8(a)) is delivered prior to the Maturity Date. Other than as specifically permitted by this Certificate of Designations, the Company may not prepay any portion of the outstanding Stated Value.

**(3) Liquidation.**

(a) **Preferential Payment to Holders.** In the event of a Liquidation Event, holders of record of Series B Preferred Shares (each, a “**Holder**” and collectively, the “**Holders**”) shall be entitled to receive in cash out of the assets of the Company, whether from capital or from earnings available for distribution to its stockholders (the “**Liquidation Funds**”) upon such Liquidation Event, but before any amount shall be paid to the holders of any of the capital stock of the Company of any class junior in rank to the Series B Preferred Shares in respect of the preferences as to distributions and payments upon such Liquidation Event (such stock being referred to hereinafter collectively as “**Junior Stock**”), an amount per Series B Preferred Share equal to the Conversion Amount; provided that, if the Liquidation Funds are insufficient to pay the full amount due to the Holders and holders of shares of other classes or series of preferred stock of the Company, if any, that are of equal rank with the Series B Preferred Shares as to payments of Liquidation Funds (such stock being referred to hereinafter collectively as “**Pari Passu Stock**”), if any, then each Holder and each holder of any such Pari Passu Stock shall receive a percentage of the Liquidation Funds equal to the full amount of Liquidation Funds that would be payable to such Holder as a liquidation preference, in accordance with their respective Certificate of Designations, Preferences and Rights, as a percentage of the full amount of Liquidation Funds that would be payable to all holders of Series B Preferred Shares and Pari Passu Stock if the Liquidation Funds were sufficient to pay the full amount due to the holders of Series B Preferred Shares and Pari Passu Stock.

(b) **Distribution of Remaining Assets.** In the event of a Liquidation Event, after payment of all preferential amounts required to be paid to the Holders pursuant to Section 3(a), the remaining assets of the Company available for distribution to its stockholders shall be distributed among the holders of shares of Junior Stock in accordance with their respective rights and privileges.

**(4) Dividends.**

(a) From and after the first date of issuance of any Series B Preferred Shares (the “**Issuance Date**”), the Holders shall be entitled to receive dividends per Series B Preferred Share when, as and if declared by the Board.

(b) In addition to the dividends, if any, referred to in Section 4(a), from and after the Issuance Date, the Holders shall be entitled to receive such dividends paid and distributions made to the holders of Common Stock to the same extent as if such Holders had converted the Series B Preferred Shares into Common Stock at the Conversion Price (without regard to any limitations on conversion, including, without limitation, the applicable Maximum Percentage) and had held such shares of Common Stock on the record date for such dividends and distributions. Payments under the preceding sentence shall be made concurrently with the dividend or distribution to the holders of Common

Stock. Following the occurrence of a Liquidation Event and the payment in full to a Holder of its applicable liquidation preference as set forth in Section 3 above, such Holder shall cease to have any rights hereunder to participate in any future dividends or distributions made to the holders of Common Stock. The Company shall not declare or pay any dividends on any Junior Stock or Pari Passu Stock unless the Holders of Series B Preferred Shares then outstanding shall simultaneously receive a dividend on a pro rata basis as if the Series B Preferred Shares had been converted into shares of Common Stock pursuant to Section 5 at the then applicable Conversion Rate (as defined in Section 5(b)) immediately prior to the record date for determining the stockholders eligible to receive such dividends (without regard to any limitations on conversion, including, without limitation, the applicable Maximum Percentage). Notwithstanding the foregoing, to the extent that a Holder's right to participate in any such dividend or distribution pursuant to this Section 4 would result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, then such Holder shall not be entitled to participate in such dividend or distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such dividend or distribution (and beneficial ownership) to such extent) and the portion of such dividend or distribution shall be held in abeyance for such Holder until such time or times as its right thereto would not result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, at which time or times such Holder shall be granted such rights (and any rights under this Section 4 on such initial rights or on any subsequent such rights to be held similarly in abeyance) to the same extent as if there had been no such limitation.

(5) Conversion of Series B Preferred Shares. Series B Preferred Shares shall be convertible into shares of Common Stock, on the terms and conditions set forth in this Section 5.

(a) Holder's Conversion Right. Subject to the provisions of Section 5(e), at any time or times on or after the Issuance Date, any Holder shall be entitled to convert any whole number of Series B Preferred Shares, plus the amount of any accrued but unpaid dividends per Series B Preferred Share then remaining and any Late Charges thereon, into fully paid and nonassessable shares of Common Stock in accordance with this Section 5 at the Conversion Rate.

(b) Conversion. The number of shares of Common Stock issuable upon conversion of each Series B Preferred Share pursuant to Section 5(a) shall be determined according to the following formula (the "**Conversion Rate**"):

$$\frac{\text{Conversion Amount}}{\text{Conversion Price}}$$

No fractional shares of Common Stock are to be issued upon the conversion of any Series B Preferred Share, but rather the number of shares of Common Stock

to be issued shall be rounded up to the nearest whole number. The applicable Conversion Rate and Conversion Price from time to time in effect is subject to adjustment as hereinafter provided.

(c) Mechanics of Conversion. The conversion of Series B Preferred Shares shall be conducted in the following manner:

(i) Holder's Delivery Requirements. To convert Series B Preferred Shares into shares of Common Stock on any date (a "**Conversion Date**"), a Holder shall (A) transmit by electronic mail (or otherwise personally deliver), for receipt on or prior to 4:59 p.m., New York City Time, on such date, a copy of a properly completed notice of conversion executed by the registered Holder of the Series B Preferred Shares subject to such conversion in the form attached hereto as Exhibit I (the "**Conversion Notice**") to the Company and (B) if required by Section 5(c)(vii), but without delaying the Company's requirement to deliver shares of Common Stock on the applicable Share Delivery Date (as defined below), surrender to a common carrier for delivery to the Company as soon as practicable following such date the original certificates representing the Series B Preferred Shares being converted (or compliance with the procedures set forth in Section 18) (the "**Series B Preferred Stock Certificates**").

(ii) Company's Response. Upon receipt by the Company of copy of a Conversion Notice, the Company shall (I) as soon as practicable, but in any event within one (1) Trading Day, send, via electronic mail, a confirmation of receipt of such Conversion Notice to such Holder and the Company's transfer agent (the "**Transfer Agent**"), which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein and (II) on or before the earlier of (A) the number of Trading Days comprising the Standard Settlement Period and (B) the third (3<sup>rd</sup>) Trading Day, in each case, following the date of receipt by the Company of such Conversion Notice (a "**Share Delivery Date**"), (1) provided the Transfer Agent is participating in the Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which such Holder shall be entitled to such Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian ("**DWAC**") system, or (2) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and deliver to the address as specified in the Conversion Notice, a certificate, registered in the name of such Holder or its designee, for the number of shares of Common Stock to which such Holder shall be entitled. If the number of Series B Preferred Shares represented by the Series B Preferred

Stock Certificate(s) submitted for conversion, as may be required pursuant to Section 5(c)(vii), is greater than the number of Series B Preferred Shares being converted, then the Company shall, as soon as practicable and in no event later than three (3) Business Days after receipt of the Series B Preferred Stock Certificate(s) (the “**Preferred Stock Delivery Date**”) and at its own expense, issue and deliver to such Holder a new Series B Preferred Stock Certificate representing the number of Series B Preferred Shares not converted. In the event that a Holder elects to convert a portion of the Stated Value of such Holder’s Series B Preferred Shares prior to any applicable Installment Date, the Conversion Amount so converted shall be deducted in reverse order starting from the final Installment Amount to be paid hereunder to such Holder on the final Installment Date, unless such Holder otherwise indicates and allocates among any Installment Dates hereunder in the applicable Conversion Notice.

(iii) Dispute Resolution. In the case of a dispute as to the determination of the Weighted Average Price, Closing Bid Price or the Closing Sale Price or the arithmetic calculation of the Conversion Rate, the Conversion Price or any Redemption Price, the Company shall instruct the Transfer Agent to issue to such Holder the number of shares of Common Stock that is not disputed and the Company shall submit the disputed determinations or arithmetic calculations via electronic mail within one (1) Business Day of receipt, or deemed receipt, of the Conversion Notice or Redemption Notice or other event giving rise to such dispute, as the case may be, to the applicable Holder. If such Holder and the Company are unable to agree upon such determination or calculation within one (1) Business Day of such disputed determination or arithmetic calculation being submitted to such Holder, then the Company shall, within one (1) Business Day submit via electronic mail (a) the disputed determination of the Weighted Average Price, the Closing Bid Price or the Closing Sale Price to an independent, reputable investment bank selected by the Company and approved by such Holder (such approval not to be unreasonably conditioned, withheld or delayed), or (b) the disputed arithmetic calculation of the Conversion Rate, Conversion Price or any Redemption Price to an independent, outside accountant, selected by the Company and approved by such Holder (such approval not to be unreasonably conditioned, withheld or delayed). The Company shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the applicable Holder of the results no later than five (5) Business Days from the time it receives the disputed determinations or calculations. Such investment bank’s or accountant’s determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error. Absent bad faith by such Holder, the Company shall pay the expenses of such investment bank or accountant.

(iv) Record Holder. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of Series B Preferred Shares shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the applicable Conversion Date, irrespective of the date such shares of Common Stock are credited to such Holder's account with DTC or the date of delivery of the certificates evidencing such shares of Common Stock, as the case may be.

(v) Company's Failure to Timely Convert.

(A) Cash Damages. If on or prior to the applicable Share Delivery Date the Company shall fail to credit a Holder's balance account with DTC (or issue and deliver a certificate to such Holder if applicable) for the number of shares of Common Stock to which such Holder is entitled upon such Holder's conversion of Series B Preferred Shares (a "**Conversion Failure**"), then in addition to all other available remedies which such holder may pursue hereunder and under the other Transaction Documents, including any indemnification provisions therein, the Company shall pay in cash to such Holder on the day after the Share Delivery Date, and on each thirtieth (30<sup>th</sup>) day thereafter (prorated for periods totaling less than thirty (30) days) during which such Conversion Failure remains uncured, an amount equal to one half percent (0.5%) of the product of (I) the number of shares of Common Stock not issued to such Holder on or prior to the applicable Share Delivery Date and to which such Holder is entitled as set forth in the applicable Conversion Notice and (II) the arithmetic average of the Weighted Average Prices of the Common Stock on each Trading Day during the period beginning on the applicable Conversion Date and ending on the applicable Share Delivery Date. In addition to the foregoing, if a Conversion Failure occurs or the Company fails to comply with its obligation to deliver shares of Common Stock as contemplated pursuant to clause (ii) below, and if on or after such Trading Day (but prior to the Company remedying any such failure) such Holder purchases (in an open market transaction or otherwise) shares of Common Stock relating to the applicable Conversion Failure (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after such Holder's request and in such Holder's discretion, pay cash to such Holder in an amount equal to such Holder's total purchase price (including brokerage commissions and out-of-pocket expenses, if any) for the shares of Common Stock so purchased (such number of shares not to exceed the number of shares of Common Stock failed to be

delivered or credited, as applicable) (the “**Buy-In Price**”), at which point the Company’s obligation to deliver such certificate (and to issue such Common Stock) shall terminate. For the avoidance of doubt, to the extent that the Company makes a payment contemplated by the foregoing sentence, the applicable portion of the shares of Preferred Stock to which the Conversion Failure applied shall no longer be outstanding. Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock upon conversion of the Series B Preferred Shares as required pursuant to the terms hereof.

(B) Void Conversion Notice. If for any reason a Holder has not received all of the shares of Common Stock to which such Holder is entitled on the applicable Share Delivery Date with respect to a conversion of Series B Preferred Shares, then such Holder, upon written notice to the Company, with a copy to the Transfer Agent, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, any Series B Preferred Shares that have not been converted pursuant to such Holder’s Conversion Notice; provided that the voiding of a Holder’s Conversion Notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice pursuant to Section 5(c)(v)(A) or otherwise.

(vi) Pro Rata Conversion; Disputes. In the event the Company receives a Conversion Notice from more than one Holder for the same Conversion Date and the Company can convert some, but not all, of such Series B Preferred Shares, the Company shall convert from each Holder electing to have Series B Preferred Shares converted at such time a pro rata amount of such Holder’s Series B Preferred Shares submitted for conversion based on the number of Series B Preferred Shares submitted for conversion on such date by such Holder relative to the number of Series B Preferred Shares submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to a Holder in connection with a conversion of Series B Preferred Shares, the Company shall issue to such Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 5(c)(iii).

(vii) Book-Entry. Notwithstanding anything to the contrary set forth herein, upon conversion of Series B Preferred Shares in accordance with the terms hereof, a Holder thereof shall not be required to physically surrender the certificate representing the Series B

Preferred Shares to the Company unless (A) the full or remaining number of Series B Preferred Shares represented by the certificate are being converted, in which case such Holder shall deliver such stock certificate to the Company as soon as practicable following such conversion or (B) a Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of Series B Preferred Shares upon physical surrender of any Series B Preferred Shares. Each Holder and the Company shall maintain records showing the number of Series B Preferred Shares so converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holders and the Company, so as not to require physical surrender of the certificate representing the Series B Preferred Shares upon each such conversion. In the event of any dispute or discrepancy, such records of the Company establishing the number of Series B Preferred Shares to which the record holder is entitled shall be controlling and determinative in the absence of manifest error. Notwithstanding the foregoing, if Series B Preferred Shares represented by a certificate are converted as aforesaid, a Holder may not transfer the certificate representing the Series B Preferred Shares unless such Holder first physically surrenders the certificate representing the Series B Preferred Shares to the Company, whereupon the Company will forthwith issue and deliver upon the order of such Holder a new certificate of like tenor, registered as such Holder may request, representing in the aggregate the remaining number of Series B Preferred Shares represented by such certificate. A Holder and any assignee, by acceptance of a certificate, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of any Series B Preferred Shares, the number of Series B Preferred Shares represented by such certificate may be less than the number of Series B Preferred Shares stated on the face thereof. Each certificate for Series B Preferred Shares shall bear the following legend:

ANY TRANSFEREE OF THIS CERTIFICATE SHOULD CAREFULLY REVIEW THE TERMS OF THE COMPANY'S CERTIFICATE OF DESIGNATIONS RELATING TO THE SERIES B PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE, INCLUDING SECTION 5(c)(vii) THEREOF. THE NUMBER OF SERIES B PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE MAY BE LESS THAN THE NUMBER OF SERIES B PREFERRED SHARES STATED ON THE FACE HEREOF PURSUANT TO SECTION 5(c)(vii) OF THE CERTIFICATE OF DESIGNATIONS RELATING TO THE SERIES B PREFERRED SHARES REPRESENTED BY THIS CERTIFICATE.

(d) Mandatory Conversion at the Company's Election.

(i) General. If at any time, or from time to time, from and after the Issuance Date (i) the Weighted Average Price of the Common Stock equals or exceeds 200% of the Conversion Price as of the Issuance Date (subject to appropriate adjustments for stock splits, stock dividends, stock combinations and other similar transactions after the Issuance Date, but not giving effect to any adjustment to the Conversion Price pursuant to Sections 5(g)(i) or 5(g)(v)) for ten (10) consecutive Trading Days occurring following the Issuance Date (a "**Mandatory Conversion Measuring Period**") (a "**Mandatory Conversion Price Condition**") and (ii) no Equity Conditions Failure has occurred during the Mandatory Conversion Measuring Period relating to the applicable Mandatory Conversion (as defined below), the Company shall have the right to require all, but not less than all, of the Holders to convert all of, or any portion of (provided, that any such portion, in the aggregate, is for at least 500 Series B Preferred Shares (as adjusted for any preferred stock splits, preferred stock dividends, preferred stock combinations and other similar transactions)) the Conversion Amount then remaining under the Series B Preferred Shares, as designated in the Mandatory Conversion Notice relating to the applicable Mandatory Conversion on the applicable Mandatory Conversion Date (each as defined below) into fully paid, validly issued and nonassessable shares of Common Stock in accordance with Section 5(c) hereof at the Conversion Rate as of the applicable Mandatory Conversion Date (a "**Mandatory Conversion**"). The Company may exercise its right to require conversion under this Section 5(d) by delivering within not more than one (1) Trading Day following the end of such Mandatory Conversion Measuring Period a written notice thereof by electronic mail to all Holders and the Transfer Agent (a "**Mandatory Conversion Notice**" and the date all Holders received (or, in accordance with Section 9(f) of the Securities Purchase Agreement, are deemed to have received) such notice is referred to as a "**Mandatory Conversion Notice Date**"). Each Mandatory Conversion Notice shall be irrevocable. Each Mandatory Conversion Notice shall (i) state (a) the Trading Day on which the applicable Mandatory Conversion shall occur, which Trading Day shall be the earlier of (A) the number of Trading Days comprising the Standard Settlement Period and (B) the third (3<sup>rd</sup>) Trading Day, in each case, following the applicable Mandatory Conversion Notice Date (a "**Mandatory Conversion Date**"), (b) the aggregate Conversion Amount of the Series B Preferred Shares which the Company has elected to be subject to such Mandatory Conversion from such Holder

and all other Holders pursuant to this Section 5(d) and (c) the number of shares of Common Stock to be issued to such Holder on the applicable Mandatory Conversion Date and (ii) certify that the Mandatory Conversion Price Condition relating to the applicable Mandatory Conversion has been satisfied and that there has been no Equity Conditions Failure on any day during the period beginning on the first day of the applicable Mandatory Conversion Measuring Period prior to the applicable Mandatory Conversion Notice Date through the applicable Mandatory Conversion Notice Date. If the Company confirmed that there was no such Equity Conditions Failure and that the Mandatory Conversion Price Condition relating to the applicable Mandatory Conversion was satisfied as of the applicable Mandatory Conversion Notice Date but an Equity Conditions Failure occurs or the Mandatory Conversion Price Condition fails to be satisfied between the applicable Mandatory Conversion Notice Date and any time through the applicable Mandatory Conversion Date (a “**Mandatory Conversion Interim Period**”), the Company shall provide each Holder a subsequent written notice to that effect. If there is an Equity Conditions Failure during the applicable Mandatory Conversion Interim Period (which is not waived in writing by such Holder; provided that the Equity Condition set forth in clause (iv) of the definition of “Equity Conditions” shall not be waivable by a Holder; provided, further, that if the Equity Conditions Failure is due solely to the failure of the Equity Condition set forth in clause (iv) of the definition of “Equity Conditions” by virtue of Section 5(e)(i), such Equity Conditions Failure shall be dealt with in accordance with the provisions set forth in this Section 5(d)(i) or the Mandatory Conversion Price Condition relating to the applicable Mandatory Conversion fails to be satisfied during the applicable Mandatory Conversion Interim Period, then such Mandatory Conversion shall be null and void with respect to all or any part designated by such Holder of the unconverted Conversion Amount subject to the applicable Mandatory Conversion and such Holder shall be entitled to all the rights of a holder of Series B Preferred Shares with respect to such Conversion Amount; provided, however, that if a Holder waives in writing an Equity Conditions Failure during the applicable Mandatory Conversion Interim Period or failure to satisfy the Mandatory Conversion Price Condition relating to the applicable Mandatory Conversion during the applicable Mandatory Conversion Interim Period, then the Company shall be required to proceed with the applicable Mandatory Conversion with respect to such Holder. If a Mandatory Conversion cannot be consummated in full due to the limitations set forth in Section 5(e)(i), then (i) on the applicable Mandatory Conversion Date, only that portion of the applicable Mandatory Conversion that complies with the limitations set forth in Section 5(e)(i) shall be deemed to occur, and (ii) (1) any portion of

the applicable Mandatory Conversion that cannot occur due to such limitations will be tolled until consummating such portion of the applicable Mandatory Conversion complies with such limitations, (2) such Holder must provide prompt written notice to the Company upon disposition of any securities of the Company that would permit further consummation of any portion of the applicable Mandatory Conversion not yet consummated, and (3) on the third (3rd) Trading Day following such notice from such Holder, the newly permitted portion of the applicable Mandatory Conversion not yet consummated shall be consummated on the same terms, including, without limitation, the Mandatory Conversion Price, without any adjustment (other than for any stock dividend, stock split, stock combination, reclassification or other similar transaction during such period), as if such subsequent consummation occurred on the applicable Mandatory Conversion Date. From the date of a Mandatory Conversion Notice until the complete consummation of the related Mandatory Conversion contemplated therein (unless earlier voided in accordance with this Section 5(d)(i)), such Holder shall not take any action, or permit any action to be taken, the effect of which would increase the percentage of the number of shares of Common Stock beneficially owned by such Holder and its other Attribution Parties, other than the receipt of Common Stock from such Mandatory Conversion or from a conversion effected pursuant to Sections 5(c) and/or 5(g)(v). Notwithstanding anything to the contrary in this Section 5(d), until the applicable Mandatory Conversion has occurred, the Conversion Amount subject to the Mandatory Conversion may be converted, in whole or in part, by a Holder into shares of Common Stock pursuant to Sections 5(c) and/or 5(g)(v). All Conversion Amounts converted by a Holder after a Mandatory Conversion Notice Date shall reduce the Conversion Amount of the Series B Preferred Shares required to be converted on the related Mandatory Conversion Date, unless such Holder otherwise indicates in a Conversion Notice. In the event of a partial Mandatory Conversion of such Holder's Series B Preferred Shares pursuant hereto, the Converted Amount so converted shall be deducted in reverse order starting from the final Installment Amount to be paid hereunder to such Holder on the final Installment Date, unless such Holder otherwise indicates and allocates among any Installment Dates hereunder in a written notice to the Company.

(ii) Pro Rata Conversion Requirement. If the Company elects to cause a Mandatory Conversion pursuant to Section 5(d)(i), then it must simultaneously take the same action in the same proportion with respect to all Series B Preferred Shares. If the Company elects a Mandatory Conversion of the Series B Preferred Shares pursuant to Section 5(d)(i) with respect to less than all of the Series B Preferred Shares then outstanding, then the Company shall

require conversion of a number of Series B Preferred Shares from each of Holder equal to the product of (i) the aggregate number of Series B Preferred Shares which the Company has elected to cause to be converted pursuant to Section 5(d)(i), multiplied by (ii) the fraction, the numerator of which is the sum of the aggregate number of Series B Preferred Shares then held by such Holder and the denominator of which is the sum of the aggregate number of Series B Preferred Shares issued by the Company on the Issuance Date (such fraction with respect to each Holder is referred to as its “**Mandatory Conversion Allocation Percentage**,” and such amount with respect to each Holder is referred to as its “**Pro Rata Mandatory Conversion Amount**”). In the event that an initial Holder shall sell or otherwise transfer any of such Holder’s Series B Preferred Shares, such transferee shall be allocated a pro rata portion of such Holder’s Mandatory Conversion Allocation Percentage and Pro Rata Mandatory Conversion Amount.

(e) Limitation on Conversions.

(i) Beneficial Ownership. Notwithstanding anything to the contrary contained herein, the Company shall not affect the conversion of any portion of Series B Preferred Shares, and no Electing Holder shall have the right to convert any portion of Series B Preferred Shares pursuant to the terms and conditions of this Certificate of Designations and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, such Electing Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the “**9.99% Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. Notwithstanding anything to the contrary contained herein, at any time prior to the time the Company obtains Stockholder Approval, the Company shall not affect the conversion of any portion of Series B Preferred Shares, and no Non-Electing Holder shall have the right to convert any portion of Series B Preferred Shares pursuant to the terms and conditions of this Certificate of Designations and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, such Non-Electing Holder together with the other Attribution Parties collectively would beneficially own in excess of 19.99% (the “**19.99% Maximum Percentage**” and together with the 9.99% Maximum Percentage, the “**Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentences, the aggregate number of shares of Common Stock beneficially owned by a Holder and its other Attribution Parties shall include the number of shares of Common Stock held by such Holder and all of its other

Attribution Parties plus the number of shares of Common Stock issuable upon conversion of the Series B Preferred Shares with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted Series B Preferred Shares beneficially owned by such Holder or any of its other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Warrants) beneficially owned by such Holder or any of its other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 5(e)(i). For purposes of this Section 5(e)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”). For purposes of determining the number of outstanding shares of Common Stock a Holder may acquire upon the conversion of Series B Preferred Shares without exceeding the applicable Maximum Percentage, such Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives a Conversion Notice from a Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify such Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause such Holder’s beneficial ownership, as determined pursuant to this Section 5(e)(i), to exceed the applicable Maximum Percentage, such Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of any Holder, the Company shall within one (1) Trading Day confirm orally and in writing or by electronic mail to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including the Series B Preferred Shares, by such Holder and any of its other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares

of Common Stock to a Holder upon exercise of such Holder's Series B Preferred Shares results in such Holder and its other Attribution Parties being deemed to beneficially own, in the aggregate, more than the applicable Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which such Holder's and its other Attribution Parties' aggregate beneficial ownership exceeds the applicable Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and such Holder shall not have the power to vote or to transfer the Excess Shares. For purposes of clarity, the shares of Common Stock underlying the Series B Preferred Shares in excess of the applicable Maximum Percentage shall not be deemed to be beneficially owned by a Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 5(e)(i) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 5(e)(i) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of Series B Preferred Shares. If as of the Maturity Date, any conversion of any portion of Series B Preferred Shares cannot be consummated in full due to the limitations set forth in this Section 5(e)(i), then (i) on the Maturity Date, that portion of such conversion that complies with the limitations set forth in this Section 5(e)(i) shall be deemed to occur, (ii) (1) any portion of such conversion that cannot occur due to such limitations will be tolled until consummating such portion of such conversion complies with such limitations, (2) such Holder must provide prompt written notice to the Company upon disposition of any securities of the Company that would permit further consummation of any portion of such conversion not yet consummated, and (3) on the third (3rd) Trading Day following such notice from such Holder, the newly permitted portion of such conversion not yet consummated shall be consummated on the same terms, including, without limitation, the Conversion Price, without any adjustment (other than for any stock dividend, stock split, stock combination, reclassification or other similar transaction during such period), as if such subsequent consummation occurred on the originally contemplated conversion date and (iii) until all of such conversion is consummated in full, such Holder shall not take any action, or permit any action to be taken, the effect of which would increase the percentage of the number of shares of Common Stock beneficially owned by such Holder and its other Attribution Parties, other than receipt of Common Stock from such conversion.

(ii) Principal Market Regulation. The Company shall not be obligated to issue any shares of Common Stock pursuant to the terms of this Certificate of Designations, and the Holders shall not have the right to receive any shares of Common Stock pursuant to the terms of this Certificate of Designations, to the extent the issuance of such shares of Common Stock, combined with all shares of Common Stock previously issued pursuant to the Warrants, would exceed 3,084,581 shares of Common Stock (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) (the “**Exchange Cap**”), except that such limitation shall not apply in the event that the Company obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of Common Stock in excess of such amount. Until such approval is obtained, no Holder shall be issued in the aggregate, pursuant to the terms of this Certificate of Designations, shares of Common Stock in an amount greater than the product of the Exchange Cap multiplied by a fraction, the numerator of which is the number of Series B Preferred Shares issued to such Holder pursuant to the Securities Purchase Agreement on the Issuance Date and the denominator of which is the aggregate number of all Series B Preferred Shares issued to the Holders pursuant to the Securities Purchase Agreement on the Issuance Date (with respect to each such Holder, the “**Exchange Cap Allocation**”). In the event that any Holder shall sell or otherwise transfer any of such Holder’s Series B Preferred Shares, the transferee shall be allocated a pro rata portion of such Holder’s Exchange Cap Allocation, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation allocated to such transferee. In the event that any Holder shall convert all of such Holder’s Series B Preferred Shares into a number of shares of Common Stock which, in the aggregate, is less than such Holder’s Exchange Cap Allocation, then the difference between such Holder’s Exchange Cap Allocation and the number of shares of Common Stock actually issued to such Holder shall be allocated to the respective Exchange Cap Allocations of the remaining Holders on a pro rata basis in proportion to the shares of Common Stock underlying the Series B Preferred Shares then held by each such Holder. In the event that the Company is prohibited from issuing any shares of Common Stock for which a Conversion Notice has been received after October 31, 2017 as a result of the operation

of this Section 5(e)(ii), the Company shall pay to such Holder within three (3) Trading Days of the applicable attempted conversion, cash by wire transfer of immediately available funds pursuant to written wire instructions delivered by such Holder to the Company in an amount per share of Common Stock that would have been issuable upon such conversion if this Section 5(e)(ii) were not in effect: (x) in the event the Holder delivers a Conversion Notice to the Company before 4:00:00 p.m., New York time (or such other time as the Principal Market or other applicable Eligible Market publicly announces is the official close of trading) on any given Trading Day, the applicable Exchange Cap Weighted Average Price of the Common Stock for the applicable Exchange Cap Period on the date of such Holder's attempted conversion and (y) in the event the Holder delivers a Conversion Notice to the Company on or after 4:00:00 p.m., New York time (or such other time as the Principal Market or other applicable Eligible Market publicly announces is the official close of trading) on any given Trading Day, the Weighted Average Price of the Common Stock on the date of such Holder's attempted conversion.

(f) Transfer Taxes. The issuance of certificates for shares of the Common Stock on conversion of the Series B Preferred Shares shall be made without charge to the Holders for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificates.

(g) Adjustments to Conversion Price. The Conversion Price will be subject to adjustment from time to time as provided in this Section 5(g).

(i) Adjustment of Conversion Price upon Issuance of Shares of Common Stock. If and whenever on or after the Subscription Date, the Company issues or sells, or in accordance with this Section 5(g)(i) is deemed to have issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding shares of Common Stock deemed to have been issued or sold in connection with any Excluded Securities) for a consideration per share (the "**New Issuance Price**") less than a price (the "**Applicable Price**") equal to the Conversion Price in effect immediately prior to such issuance or sale or deemed issuance or sale (the foregoing, a "**Dilutive Issuance**"), then immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount equal to the New Issuance Price. For purposes of determining the adjusted Conversion Price under this Section 5(g)(i), the following shall be applicable:

(A) Issuance of Options. If the Company in any manner grants or sells any Options and the lowest price per share for which

one share of Common Stock is issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 5(g)(i)(A), the “lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option” shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting or sale of the Option, upon exercise of the Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the granting or sale of such Option, upon exercise of such Option and upon conversion exercise or exchange of any Convertible Security issuable upon exercise of such Option. No further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such shares of Common Stock upon conversion, exercise or exchange of such Convertible Securities.

(B) Issuance of Convertible Securities. If the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 5(g)(i)(B), the “lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange “ shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the issuance or sale of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security less any consideration paid or payable by the Company with respect to such one share of Common Stock upon the issuance or sale of such Convertible Security and upon conversion, exercise or exchange of such Convertible Security. No further adjustment of the Conversion Price shall be made upon the actual issuance of such shares of

Common Stock upon conversion, exercise or exchange of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price had been or are to be made pursuant to other provisions of this Section 5(g)(i), no further adjustment of the Conversion Price shall be made by reason of such issue or sale.

(C) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for shares Common Stock increases or decreases at any time, the Conversion Price in effect at the time of such increase or decrease shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 5(g)(i)(C), if the terms of any Option or Convertible Security that was outstanding as of the Subscription Date are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the shares of Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 5(g)(i) shall be made if such adjustment would result in an increase of the Conversion Price then in effect.

(D) Calculation of Consideration Received. In case any Option is issued in connection with the issue or sale of other securities of the Company, together comprising one integrated transaction, (x) the Options will be deemed to have been issued for the Option Value of such Options and (y) the other securities issued or sold in such integrated transaction shall be deemed to have been issued or sold for the difference of (I) the aggregate consideration received by the Company less any consideration paid or payable by the Company pursuant to the terms of such other securities of the Company, less (II) the Option Value of such Options. If any shares of Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received or receivable therefor will be deemed to be the net amount received by the Company therefor. If any Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such

consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company will be the Closing Sale Price of such publicly traded securities on the date of receipt of such publicly traded securities. If any shares of Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Required Holders. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the "**Valuation Event**"), the fair value of such consideration will be determined within five (5) Business Days after the tenth (10<sup>th</sup>) day following the Valuation Event by an independent, reputable appraiser selected by the Company with the consent of the Required Holders (such consent not to be unreasonably conditioned, withheld or delayed). The determination of such appraiser shall be final and binding upon all parties absent manifest error. Absent bad faith by the Required Holders, the fees and expenses of such appraiser shall be borne by the Company.

(E) Record Date. If the Company takes a record of the holders of shares of Common Stock for the purpose of entitling them (I) to receive a dividend or other distribution payable in shares of Common Stock, Options or in Convertible Securities or (II) to subscribe for or purchase shares of Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(F) No Readjustments. For the avoidance of doubt, in the event the Conversion Price has been adjusted pursuant to this Section 5(g)(i) and the Dilutive Issuance that triggered such adjustment does not occur, is not consummated, is unwound or is cancelled after the facts for any reason whatsoever, in no event shall the Conversion Price be readjusted to the Conversion Price that would have been in effect if such Dilutive Issuance had not occurred or been consummated.

(ii) Voluntary Adjustment By Company. The Company may at any time, with the prior written consent of the Required Holders, reduce the then current Conversion Price to any amount and for any period of time deemed appropriate by the Board.

(iii) Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization 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. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split 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. Any adjustment under this Section 5(g)(iii) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(iv) Other Events. If any event occurs of the type contemplated by the provisions of this Section 5(g) but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Board will make an appropriate adjustment in the Conversion Price, as mutually determined by the Board and the Required Holders, so as to protect the rights of the Holders; provided that no such adjustment pursuant to this Section 5(g)(iv) will increase the Conversion Price as otherwise determined pursuant to this Section 5(g).

(v) Triggering Event Conversion Price. At any time from and after the occurrence of a Triggering Event and continuing after such occurrence until the date that is ten (10) Trading Days immediately following the date such Triggering Event is cured or waived in writing by a Holder, such Holder may at any time and from time to time, at such Holder's option, deliver one or more Conversion Notices to the Company indicating such Holder's election to convert (each, a "**Triggering Event Conversion**", and the date of such Triggering Event Conversion, each, a "**Triggering Event Conversion Date**") all, or any part of, the Conversion Amount then outstanding hereunder (such portion of the Conversion Amount subject to such Triggering Event Conversion, the "**Triggering Event Conversion Amount**") into shares of Common Stock at the applicable Triggering Event Conversion Price in lieu of the Conversion Price then in effect. On any Triggering Event Conversion Date, the Holder may voluntarily convert any Triggering Event

Conversion Amount pursuant to Section 5(c) (with “Triggering Event Conversion Price” replacing “Conversion Price” for all purposes hereunder with respect to such Triggering Event Conversion) by designating in the Conversion Notice delivered pursuant to this Section 5(g)(v) that the Holder is electing to use the Triggering Event Conversion Price for such conversion according to this Section 5(g)(v) by checking the box “Triggering Event Conversion Price” on the applicable Conversion Notice. The Company shall be required to honor such Triggering Event Conversions by delivering shares of Common Stock on or prior to the applicable Share Delivery Date pursuant to the terms and conditions set forth in Section 5(c), but based on a Conversion Price equal to the Triggering Event Conversion Price. In the event that the Holder elects to convert pursuant to this Section 5(g)(v), the Conversion Amount so converted shall be deducted from the final Installment Amounts to be paid hereunder on the final Installment Date, unless the Holder otherwise indicates and allocates among any Installment Dates hereunder in the applicable Conversion Notice(s).

(h) Notices.

(i) Promptly upon any adjustment of the Conversion Price pursuant to Section 5(g), the Company will give written notice thereof to each Holder, setting forth in reasonable detail, and certifying, the calculation of such adjustment. In the case of a dispute as to the determination of such adjustment, then such dispute shall be resolved in accordance with the procedures set forth in Section 5(c)(iii).

(ii) The Company will give written notice to each Holder at least ten (10) Business Days prior to the date on which the Company closes its books or takes a record (I) with respect to any dividend or distribution upon the Common Stock, (II) with respect to any pro rata subscription offer to holders of Common Stock or (III) for determining rights to vote with respect to any Fundamental Transaction or Liquidation Event, provided that such information shall be made known to the public prior to or in conjunction with such notice being provided to such Holder.

(iii) The Company will also give written notice to each Holder at least ten (10) Business Days prior to the date on which any Fundamental Transaction or Liquidation Event will take place, provided that such information shall be made known to the public prior to or in conjunction with such notice being provided to such Holder.

(i) **Pre-Delivery of Common Stock.** Notwithstanding anything to the contrary herein, but subject to the limitations contained in Section 5(e), with the prior written consent of a Holder, the Company may at any time or from time to time deliver shares of Common Stock to such Holder and such shares of Common Stock (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the delivery thereof to such Holder) shall be used to offset any requirement thereafter to deliver shares of Common Stock hereunder to such Holder.

**(6) Redemption at Option of Holders.**

(a) **Triggering Event.** A “**Triggering Event**” shall be deemed to have occurred at such time as any of the following events:

(i) the shares of Common Stock issued and issuable with respect to the Series B Preferred Shares shall not be: (x) issued or issuable without restrictive legends and eligible for sale without restriction or limitation pursuant to (A) Rule 144 of the Securities Act and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereto) or (B) Rule 3(a)(9) of the Securities Act and without the need for registration under any applicable federal or state securities laws and (y) eligible for sale or resale without restriction or limitation pursuant to an effective registration statement;

(ii) (A) the suspension of the Common Stock from trading on an Eligible Market for a period of five (5) consecutive Trading Days or for more than an aggregate of twenty (20) Trading Days in any 365-day period or (B) the failure of the Common Stock to be listed on an Eligible Market;

(iii) the Company’s (A) failure to cure a Conversion Failure within three (3) Trading Days after the applicable Share Delivery Date with respect to a conversion of Series B Preferred Shares or (B) notice, written or oral, to any Holder, including by way of public announcement, or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Series B Preferred Shares into shares of Common Stock that is validly tendered in accordance with the provisions of this Certificate of Designations;

(iv) at any time following the tenth (10<sup>th</sup>) consecutive Business Day that a Holder’s Authorized Share Allocation (as defined in Section 10(a)) is less than 150% of the sum of (A) the number of shares of Common Stock that such Holder would be entitled to receive upon a conversion of the full Conversion Amount of the Series B Preferred Shares (without regard to any limitations on conversion set forth in Section 5(e) or otherwise) and (B) the number of shares of Common Stock that such Holder would be entitled to receive upon exercise in full of such Holder’s Warrants (without regard to any limitations on exercise set forth in the Warrants);

(v) the Company's failure to pay to such Holder any amounts when and as due pursuant to this Certificate of Designations or any other Transaction Document, only if such breach remains uncured for a period of at least three (3) consecutive Business Days;

(vi) the Company or any of its Subsidiaries, pursuant to or within the meaning of Title 11, U.S. Code, or any similar federal, foreign or state law for the relief of debtors (collectively, "**Bankruptcy Law**"), (A) commences a voluntary case, (B) consents to the entry of an order for relief against it in an involuntary case, (C) consents to the appointment of a receiver, trustee, assignee, liquidator or similar official (a "**Custodian**"), (D) makes a general assignment for the benefit of its creditors or (E) admits in writing that it is generally unable to pay its debts as they become due;

(vii) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (A) is for relief against the Company or any of its Subsidiaries in an involuntary case, (B) appoints a Custodian of the Company or any of its Subsidiaries or (C) orders the liquidation of the Company or any of its Subsidiaries;

(viii) a final judgment or judgments for the payment of money aggregating in excess of \$500,000 are rendered against the Company or any of its Subsidiaries and which judgments are not, within thirty (30) days after the entry thereof, bonded, discharged or stayed pending appeal, or are not discharged within thirty (30) days after the expiration of such stay; provided, however, that any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$500,000 amount set forth above so long as the Company provides the Holders with a written statement from such insurer or indemnity provider (which written statement shall be reasonably satisfactory to the Required Holders) to the effect that such judgment is covered by insurance or an indemnity and the Company will receive the proceeds of such insurance or indemnity within thirty (30) days of the issuance of such judgment;

(ix) other than as specifically set forth in another clause of this Section 6(a), the Company breaches (A) any representation, warranty, covenant or other term or condition of any Transaction Document, if such breach would reasonably be expected to have a Material Adverse Effect (as defined in the Securities Purchase Agreement) or (B) any material representation, warranty, covenant or other term of any Transaction Document, except, in each case, in the case of a breach of a covenant or other term which is curable, only if such breach remains uncured for a period of at least five (5) Business Days;

(x) any breach or failure in any respect to comply with either Sections 13 or 14 of this Certificate of Designations only if such breach remains uncured for a period of at least three (3) consecutive Business Days;

(xi) any material damage to, or loss, theft or destruction of, any material amount of property of the Company, whether or not insured, or any strike, lockout, labor dispute, embargo, condemnation, act of God or public enemy, or other casualty which causes, for more than fifteen (15) consecutive days, the cessation or substantial curtailment of revenue producing activities at any facility of the Company or any Subsidiary, if any such event or circumstance would reasonably be expected to have a Material Adverse Effect (as defined in the Securities Purchase Agreement);

(xii) a false or inaccurate certification (including a false or inaccurate deemed certification) by the Company that the Equity Conditions are satisfied or that there has been no Equity Conditions Failure or as to whether any Triggering Event has occurred; or

(xiii) the Company's failure for any reason after the Issuance Date to satisfy the current public information requirement under Rule 144(c).

(b) Redemption Option Upon Triggering Event. In addition to all other rights of the Holders contained herein, at any time after the earlier of a Holder's receipt of a Notice of Triggering Event (as defined in Section 6(c)) and a Holder becoming aware of a Triggering Event, such Holder shall have the right, at such Holder's option, to require the Company to redeem (a "**Triggering Event Redemption**") all or a portion of such Holder's Series B Preferred Shares at a price per Series B Preferred Share equal to the greater of (A) 125% of the Conversion Amount and (B) the product of (1) the Conversion Amount being redeemed and (2) the quotient determined by dividing (I) the greatest Closing Sale Price of the Common Stock during the period beginning on the date immediately preceding such Triggering Event and ending on the date such Holder delivers the Notice of Redemption at Option of Holder (as defined below), by (II) the lowest Conversion Price in effect during such period (the "**Triggering Event Redemption Price**").

(c) Mechanics of Triggering Event Redemption at Option of Buyer. Within one (1) Business Day after the occurrence of a Triggering Event, the Company shall deliver written notice thereof via electronic mail and overnight courier ("**Notice of Triggering Event**") to each Holder. At any time after the

earlier of a Holder's receipt of a Notice of Triggering Event and such Holder becoming aware of a Triggering Event, any holder of Series B Preferred Shares then outstanding may require the Company to redeem up to all of such Holder's Series B Preferred Shares by delivering written notice thereof via electronic mail and overnight courier ("**Notice of Redemption at Option of Holder**") to the Company, which Notice of Redemption at Option of Holder shall indicate the number of Series B Preferred Shares that such Holder is electing to redeem.

(d) Payment of Triggering Event Redemption Price. Upon the Company's receipt of a Notice(s) of Redemption at Option of Holder from any Holder, the Company shall within one (1) Business Day of such receipt notify each other Holder by electronic mail of the Company's receipt of such notice(s). The Company shall deliver to a Holder an amount in cash equal to the applicable Triggering Event Redemption Price by wire transfer of immediately available funds on the third (3<sup>rd</sup>) Business Day after such Holder's delivery of a Notice of Redemption at Option of Holder to the Company, provided that the Company shall deliver to all Holders that deliver a Notice of Redemption at Option of Holder prior to the third (3<sup>rd</sup>) Business Day after the Company's receipt of the first Notice of Redemption at Option of Holder on the third (3<sup>rd</sup>) Business Day after the first Holder's delivery of a Notice of Redemption at Option of Holder to the Company (a "**Triggering Event Redemption Date**"). To the extent redemptions required by this Section 6 are deemed or determined by a court of competent jurisdiction to be prepayments of the Series B Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. If the Company is unable to redeem all of the Series B Preferred Shares submitted for redemption, the Company shall (i) redeem a pro rata amount from each Holder based on the number of Series B Preferred Shares submitted for redemption by such Holder relative to the total number of Series B Preferred Shares submitted for redemption by all Holders and (ii) in addition to any remedy such Holder may have under this Certificate of Designations, pay to each Holder interest at the rate of one and one-half percent (1.5%) per month (prorated for partial months) in respect of each unredeemed Series B Preferred Share until paid in full. In the event less than all of a Holder's remaining Series B Preferred Shares are redeemed pursuant hereto, the Conversion Amount so redeemed shall be deducted from the Installment Amounts applying such reduction to the Installment Dates in reverse order first to the last Installment Date on which Installment Amounts are then scheduled to be paid to such Holder, unless such Holder shall otherwise specify in the Notice of Redemption at Option of Holder or other applicable notice. The Holders and Company agree that in the event of the Company's redemption of any Series B Preferred Shares under this Section 6, the Holders' damages would be uncertain and difficult to estimate because of the parties' inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for the Holders. Accordingly, any redemption premium due under this Section 6 is intended by the parties to be, and shall be deemed, a reasonable estimate of the Holders' actual loss of its investment opportunity and not as a penalty.

(e) Disputes; Miscellaneous. In the event of a dispute as to the determination of the arithmetic calculation of any Triggering Event Redemption Price, such dispute shall be resolved pursuant to Section 5(c)(iii) above with the term “Redemption Price” being substituted for the term “Conversion Rate”. A Holder’s delivery of a Void Optional Redemption Notice (as defined in Section 7(c)) and exercise of its rights following such notice shall not affect the Company’s obligations to make any payments which have accrued prior to the date of such notice. In the event of a redemption pursuant to this Certificate of Designations of less than all of the Series B Preferred Shares represented by a particular Series B Preferred Stock Certificate, the Company shall promptly cause to be issued and delivered to the Holder of such Series B Preferred Shares a Series B Preferred Stock Certificate representing the remaining Series B Preferred Shares which have not been redeemed, if necessary.

(7) Redemption by the Company.

(a) General. Other than as specifically permitted by this Certificate of Designations, the Company may not redeem any of the outstanding Series B Preferred Shares.

(b) Redemption by Other Holders. Upon the Company’s receipt of notice from any Holder for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 6(b) or Section 8(a) (each, an “**Other Redemption Notice**”), the Company shall immediately, but no later than one (1) Business Day of its receipt thereof, forward to each Holder by electronic mail a copy of such notice. If the Company receives a Redemption Notice and one or more Other Redemption Notices, during the seven (7) Business Day period beginning on and including the date which is three (3) Business Days prior to the Company’s receipt of such Holder’s Redemption Notice and ending on and including the date which is three (3) Business Days after the Company’s receipt of a Holder’s Redemption Notice and the Company is unable to redeem all Stated Value, dividends, Late Charges and other amounts designated in such Redemption Notice and such Other Redemption Notices received during such seven (7) Business Day period, then the Company shall redeem a pro rata amount from each Holder based on the Stated Value of the Series B Preferred Shares submitted for redemption pursuant to such Redemption Notice and such Other Redemption Notices received by the Company during such seven (7) Business Day period.

(c) Insufficient Assets. If upon a Redemption Date, the assets of the Company are insufficient to pay the applicable Redemption Price for each Series B Preferred Share to be redeemed, the Company shall (i) take all appropriate action reasonably within its means to maximize the assets available for paying the applicable Redemption Price, (ii) redeem out of all such assets available therefor on the applicable Redemption Date the maximum possible number of Series B Preferred Shares that it can redeem on such date, pro rata

among the Holders to be redeemed in proportion to the aggregate number of Series B Preferred Shares then held by each such Holder on the applicable Redemption Date and (iii) following the applicable Redemption Date, at any time and from time to time when additional assets of the Company become available to redeem the remaining Series B Preferred Shares, the Company shall use such assets, at the end of the then current fiscal quarter, to redeem the balance of such Series B Preferred Shares, or such portion thereof for which assets are then available, on the basis set forth above at the applicable Redemption Price, and such assets will not be used prior to the end of such fiscal quarter for any other purpose. The Company shall pay to each Holder the applicable Redemption Price for each Series B Preferred Share without regard to the legal availability of funds unless expressly prohibited by applicable law or unless the payment of such Redemption Price would reasonably be expected to result in personal liability to the directors of the Company.

(d) Void Redemption. In the event that the Company does not pay a Redemption Price within the applicable time period, at any time thereafter and until the Company pays such unpaid applicable Redemption Price in full, a Holder shall have the option to, in lieu of redemption, require the Company to promptly return to such Holder any or all of the Series B Preferred Shares that were submitted for redemption by such Holder and for which the applicable Redemption Price has not been paid, by sending written notice thereof to the Company via electronic mail (the “**Void Optional Redemption Notice**”). Upon the Company’s receipt of such Void Optional Redemption Notice, (i) the Redemption Notice of Holder shall be null and void with respect to those Series B Preferred Shares subject to the Void Optional Redemption Notice, (ii) the Company shall immediately return any Series B Preferred Shares subject to the Void Optional Redemption Notice and (iii) the Conversion Price of such returned Series B Preferred Shares shall be adjusted to the lesser of (A) the Conversion Price as in effect on the date on which the Void Optional Redemption Notice is delivered to the Company and (B) the lowest Weighted Average Price of the Common Stock during the period beginning on the date on which the applicable Redemption Notice is delivered to the Company and ending on the date on which the applicable Void Optional Redemption Notice is delivered to the Company and ending on and including the date on which the applicable Redemption Notice is voided. A Holder’s delivery of a Void Optional Redemption Notice and exercise of its rights following such notice shall not affect the Company’s obligations to make any payments of Late Charges which have accrued prior to the date of such notice with respect to the Conversion Amount subject to such notice.

**(8) Other Rights of Holders.**

(a) Change of Control Redemption Right. No sooner than fifteen (15) days nor later than ten (10) days prior to the consummation of a Change of Control, but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via electronic mail and

overnight courier to the Holders (a “**Change of Control Notice**”) setting forth a description of such transaction in reasonable detail and the anticipated Change of Control Redemption Date if then known. At any time during the period (the “**Change of Control Period**”) beginning after a Holder’s receipt of a Change of Control Notice and ending on the date that is twenty (20) Trading Days after the consummation of such Change of Control, such Holder may require the Company to redeem (a “**Change of Control Redemption**”) all or any portion of such Holder’s Series B Preferred Shares by delivering written notice thereof (“**Change of Control Redemption Notice**”) to the Company, which Change of Control Redemption Notice shall indicate the Conversion Amount such Holder is electing to redeem. Any Series B Preferred Shares subject to redemption pursuant to this Section 8(a) shall be redeemed by the Company in cash at a price equal to greater of (i) 125% of the Conversion Amount being redeemed and (ii) the product of (A) the Conversion Amount being redeemed and (B) the quotient determined by dividing (1) the greatest Closing Sale Price of the shares of Common Stock during the period beginning on the date immediately preceding the earlier to occur of (x) the consummation of the Change of Control and (y) the public announcement of such Change of Control and ending on the date the Holder delivers the Change of Control Redemption Notice, by (II) the lowest Conversion Price in effect during such period (the “**Change of Control Redemption Price**”). The Company shall make payment of the Change of Control Redemption Price concurrently with the consummation of such Change of Control if such a Change of Control Redemption Notice is received prior to the consummation of such Change of Control and within five (5) Trading Days after the Company’s receipt of such notice otherwise (the “**Change of Control Redemption Date**”). To the extent redemptions required by this Section 8(a) are deemed or determined by a court of competent jurisdiction to be prepayments of the Series B Preferred Shares by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 8(a), until the Change of Control Redemption Price (together with any interest thereon) is paid in full, the Conversion Amount submitted for redemption under this Section 8(a) may be converted, in whole or in part, by a Holder into shares of Common Stock, or in the event the Conversion Date is after the consummation of the Change of Control, shares or equity interests of the Successor Entity substantially equivalent to the Company’s Common Stock pursuant to Section 5(c). In the event less than all of a Holder’s remaining Series B Preferred Shares are redeemed pursuant hereto, the Conversion Amount so redeemed shall be deducted from the Installment Amounts applying such reduction to the Installment Dates in reverse order first to the last Installment Date on which Installment Amounts are then scheduled to be paid to such Holder, unless such Holder shall otherwise specify in the Change of Control Redemption Notice or other applicable notice. The parties hereto agree that in the event of the Company’s redemption of any portion of the Series B Preferred Shares under this Section 8(a), the Holders’ damages would be uncertain and difficult to estimate because of the parties’ inability to predict future interest rates and the

uncertainty of the availability of a suitable substitute investment opportunity for the Holders. Accordingly, any redemption premium due under this Section 8(a) is intended by the parties to be, and shall be deemed, a reasonable estimate of the Holders' actual loss of its investment opportunity and not as a penalty. In the event that the Company does not pay the Change of Control Redemption Price on the Change of Control Redemption Date, then the Holders shall have the right to void the redemption pursuant to Section 7(c).

(b) Assumption. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Certificate of Designations and the other Transaction Documents in accordance with the provisions of this Section 8(b) and agrees to deliver to each Holder in exchange for such Holder's Series B Preferred Shares a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Certificate of Designations including, without limitation, having a stated value equal to the Stated Value and having similar conversion rights, dividend rights and ranking to the Series B Preferred Shares. Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Certificate of Designations (so that from and after the date of such Fundamental Transaction, each and every provision of this Certificate of Designations referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Certificate of Designations with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Certificate of Designations; and, solely at the request of a Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common capital stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Certificate of Designations) to such Holder in exchange for such Holder's Series B Preferred Shares a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to the Series B Preferred Shares and convertible for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent (as set forth below) to the shares of Common Stock acquirable and receivable upon conversion of such Holder's Series B Preferred Shares (without regard to any limitations on the conversion of the Series B Preferred Shares set forth in this Certificate of Designations) prior to such Fundamental Transaction (provided, however, to the extent that a Holder's right to receive any such shares of publicly traded common stock (or

their equivalent) of the Successor Entity would result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, then such Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for such Holder until such time or times, as its right thereto would not result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, at which time or times such Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to such Holder, and with an identical conversion price to the Conversion Price hereunder (such adjustments to the number of shares of capital stock and such conversion price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of the Series B Preferred Shares that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by such Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to each Holder confirmation that there shall be issued upon conversion of the Series B Preferred Shares at any time after the occurrence or consummation of the Fundamental Transaction, as elected by a Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the conversion of the Series B Preferred Shares prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that such Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had such Holder's Series B Preferred Shares been converted immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the conversion of the Series B Preferred Shares), as adjusted in accordance with the provisions of this Certificate of Designations. The provisions of this Section 8(b) shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of the Series B Preferred Shares.

(c) Corporate Events. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company

shall make appropriate provision to ensure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, such Holder will thereafter have the right to receive at its option upon surrender of such Holder's Series B Preferred Shares upon the occurrence or consummation of the Corporate Event, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) such Holder is entitled to receive upon the conversion of such Holder's Series B Preferred Shares prior to such Corporate Event (but not in lieu of such items still issuable under Sections 4(b) and 8(d), which shall continue to be receivable on the Common Stock or on such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holders would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had such Holder's Series B Preferred Shares been converted immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on conversion, including without limitation, the applicable Maximum Percentage) (provided, however, to the extent that a Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, then such Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for such Holder until such time or times, as its right thereto would not result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, at which time or times such Holder shall be delivered such shares to the extent as if there had been no such limitation). The provisions of this Section shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of the Series B Preferred Shares.

(d) Purchase Rights. If at any time the Company 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 Holders will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such Holder could have acquired if such Holder had held the number of shares of Common Stock acquirable upon complete conversion of the Series B Preferred Shares (without taking into account any limitations or restrictions on the convertibility of the Series B Preferred Shares) 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 Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that a Holder's right to participate in any such Purchase Right would result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, then such Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for such Holder until such time or times as its right thereto would not result in such Holder and its other Attribution Parties exceeding the applicable Maximum Percentage, at which time or times such Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right to be held similarly in abeyance) to the same extent as if there had been no such limitation).

**(9) COMPANY CONVERSION OR REDEMPTION.**

(a) General. On each applicable Installment Date, provided there has been no Equity Conditions Failure during the Equity Conditions Measuring Period relating to the applicable Installment Date, the Company shall pay to each Holder the Installment Amount due on such date by converting all or some of such Installment Amount into Common Stock in accordance with this Section 9 (a "**Company Conversion**"); provided, however, that the Company may, at its option following written notice to each Holder as set forth below, pay the Installment Amount by redeeming such Installment Amount in cash (a "**Company Redemption**") or by any combination of a Company Conversion and a Company Redemption so long as all of the applicable Installment Amount due on any Installment Date shall be converted and/or redeemed by the Company on the applicable Installment Date, subject to the provisions of this Section 9; provided, further, that in the event that the sole cause of an Equity Conditions Failure during the applicable Equity Conditions Measuring Period was due to the disclosure of material nonpublic information regarding the Company or any of its Subsidiaries, which constitutes an Equity Conditions Failure pursuant to clause (viii) of the definition of "Equity Conditions", then, solely if such Holder does not waive such Equity Conditions Failure in writing, the Company may, at its option, elect to pay the Installment Amount in cash (irrespective of any prior election or notice to pay such amount by converting all or some of the applicable Installment Amount into Common Stock) or by deferring such Installment Payment to the immediately subsequent Installment Date in accordance with the procedures set forth in Section 9(d). The Company shall deliver a written notice to the Holders setting forth its election pursuant to the immediately preceding sentence at least one (1) Trading Day prior to the applicable Installment Date. On or prior to the date which is the twenty-first (21st) Trading Day prior to each Installment Date (each, an "**Installment Notice Due Date**"), each Holder shall have received from the Company written notice (each, a "**Company Installment Notice**" and the date all the Holders receive such notice is referred to as the "**Company Installment Notice Date**"), which Company Installment Notice shall either (A) confirm that the applicable Installment Amount of such Holder's Series B Preferred Shares shall be converted to Common Stock in whole or in part pursuant to a Company Conversion (such amount to be converted, the

“**Company Conversion Amount**”) or (B) (1) state that the Company elects to redeem for cash, or is required to redeem for cash in accordance with the provisions of this Certificate of Designations, in whole or in part, the applicable Installment Amount pursuant to a Company Redemption and (2) specify the portion of such Installment Amount which the Company elects or is required to redeem pursuant to a Company Redemption (such amount to be redeemed, the “**Company Redemption Amount**”) and the portion of such Installment Amount that is the Company Conversion Amount, which amounts, when added together, must equal the applicable Installment Amount. Each Company Installment Notice shall be irrevocable. If the Company does not timely deliver a Company Installment Notice in accordance with this Section 9, then the Company shall be deemed to have delivered an irrevocable Company Installment Notice confirming a Company Conversion. The Company shall pay the Installment Amount in Common Stock pursuant to a Company Conversion and/or in cash pursuant to a Company Redemption pursuant to this Section 9 in the same ratio for all Holders. The Company Conversion Amount (whether set forth in the Company Installment Notice or by operation of this Section 9) shall be converted in accordance with Section 9(b) and the Company Redemption Amount shall be redeemed in accordance with Section 9(c).

(b) **Mechanics of Company Conversion.** If the Company delivers a Company Installment Notice and confirms, or is deemed to have confirmed, in whole or in part, a Company Conversion in accordance with Section 9(a), then (1) contemporaneously with the delivery of the Company Installment Notice on the applicable Company Installment Notice Date, the Company shall, or shall direct the Transfer Agent to, credit each Holder’s account with DTC (or if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and deliver to such Holder a certificate for) a number of shares of Common Stock (the “**Pre-Installment Conversion Shares**”) equal to (x) the quotient of (I) the applicable Company Conversion Amount related to the applicable Installment Date divided by (II) the Company Pre-Installment Conversion Price then in effect, less (y) any then outstanding Installment Conversion Shares Excess and (2) on the applicable Installment Date, (x) the Company shall certify that no Equity Conditions Failure has occurred as of the applicable Installment Date and (y) the Company shall, or shall direct the Transfer Agent to, credit each Holder’s account with DTC (or if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and deliver to such Holder a certificate) for an additional number of shares of Common Stock, if any, equal to the Installment Balance Conversion Shares; provided, that no Equity Conditions Failure has occurred (unless waived in writing by such Holder) on each day during the period commencing on such Company Installment Notice Date through the applicable Installment Date. On the second (2<sup>nd</sup>) Trading Day immediately after the end of the applicable Equity Conditions Measuring Period, the Company shall deliver a written notice setting forth the calculation of the Installment Balance Conversion Shares (and the calculation of the component parts of such calculation) to each Holder. If a Triggering Event occurs during the period from any Company Installment

Notice Date through the applicable Installment Date, each Holder may elect a Triggering Event Redemption in accordance with Section 6(b) without being required to return to the Company any Pre-Installment Conversion Shares previously delivered to such Holder (but such Pre-Installment Conversion Shares shall reduce any future delivery of Pre-Installment Conversion Shares). All Pre-Installment Conversion Shares and Installment Balance Conversion Shares shall be fully paid and nonassessable shares of Common Stock (rounded to the nearest whole share). If the Company confirmed (or is deemed to have confirmed by operation of Section 9(a)) the conversion of the applicable Company Conversion Amount, in whole or in part, and an Equity Conditions Failure occurs between the applicable Company Installment Notice Date and any time through the applicable Installment Date (the “**Interim Installment Period**”), the Company shall provide each Holder a subsequent written notice to that effect. If an Equity Conditions Failure occurs (unless waived in writing by such Holder) on any day during such Interim Installment Period, then at the option of such Holder designated in writing to the Company within two (2) Trading Days of written notice thereof to such Holder, such Holder may require the Company to do either one of the following: (i) the Company shall redeem all or any part designated by such Holder of the unconverted Company Conversion Amount on such Installment Date and the Company shall pay to such Holder on such Installment Date, by wire transfer of immediately available funds, an amount in cash equal to such portion of such Company Conversion Amount designated by such Holder or (ii) the Company Conversion shall be null and void with respect to all or any part designated by such Holder of the unconverted Company Conversion Amount and such Holder shall be entitled to all the rights of a Holder with respect to such amount of the Company Conversion Amount. If the Company fails to redeem any Company Conversion Amount on or before the applicable Installment Date by payment of such amount on the applicable Installment Date, then such Holder shall have the rights set forth in Section 7 as if the Company failed to pay the applicable Company Installment Redemption Price (as defined below) and all other rights under this Certificate of Designations (including, without limitation, such failure constituting a Triggering Event described in Section 6(a)(v)); provided, however, that upon payment of such Company Conversion Amount within three (3) Business Days, such Triggering Event will be considered cured or waived, as applicable. Notwithstanding the foregoing, if a Holder waives in writing an Equity Conditions Failure during the applicable Interim Installment Period, then the Company shall be required to proceed with the applicable Company Conversion with respect to such Holder Notwithstanding anything to the contrary in this Section 9(b), but subject to the limitations set forth in Section 5(e), until the Company credits a Holder’s account with DTC, or if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issues and delivers to such Holder a certificate for, the shares of Common Stock representing the Company Conversion Amount to such Holder, the Company Conversion Amount may be converted by such Holder into Common Stock pursuant to Sections 5(c) and/or 5(g)(v).

(c) Mechanics of Company Redemption. If the Company elects a Company Redemption in accordance with Section 9, then the Company Redemption Amount which is to be paid to each Holder on the applicable Installment Date shall be redeemed by the Company and the Company shall pay to such Holder on such Installment Date, by wire transfer of immediately available funds, an amount in cash (the “**Company Installment Redemption Price**”) equal to the Company Redemption Amount. If the Company fails to redeem the Company Redemption Amount on the applicable Installment Date by payment of the Company Installment Redemption Price on such date, then at the option of a Holder designated in writing to the Company (any such designation shall be deemed a “**Conversion Notice**” pursuant to Section 5(c) for purposes of this Certificate of Designations), (i) such Holder shall have the rights set forth in Section 7 as if the Company failed to pay the applicable Company Installment Redemption Price and all other rights as a Holder (including, without limitation, such failure constituting a Triggering Event described in Section 6(a)(v)) and (ii) such Holder may require the Company to convert all or any part of such Company Redemption Amount at the Company Installment Conversion Price as in effect on the applicable Installment Date; provided, however, that upon payment of such Redemption Amount within three (3) Business Days, such Triggering Event will be considered cured or waived, as applicable. Conversions required by this Section 9(c) shall be made in accordance with the provisions of Section 5(c). Notwithstanding anything to the contrary in this Section 9(c), but subject to Section 5(e), until the Company Installment Redemption Price (together with any interest thereon) is paid in full, the Company Redemption Amount (together with any interest thereon) may be converted, in whole or in part, by a Holder into Common Stock pursuant to Sections 5(c) and/or 5(g)(v).

(d) Deferred Installment Amount. Notwithstanding any provision of this Section 9 to the contrary, each Holder may from time to time (i) at its option and in its sole discretion but subject to the last sentence of this Section 9(d) or (ii) with the prior written consent of the Company, deliver a written notice to the Company no later than the Business Day immediately prior to the applicable Installment Date (which date shall not be after the Maturity Date) electing to have the payment of all or any portion of an Installment Amount payable on such Installment Date deferred (such amount(s) deferred, the “**Deferral Amount**”) until the immediately subsequent Installment Date (if any), in which case, the Deferral Amount shall be added to, and become part of, the Installment Amount to be paid on such subsequent Installment Date. Any notice delivered by a Holder pursuant to this Section 9(d) shall set forth (i) the Deferral Amount requested by such Holder and (ii) the date on which such Holder requests that such Deferral Amount shall be payable (which date shall be the immediately subsequent Installment Date). Without the prior written consent of the Company, in no event shall a Holder be entitled to elect deferral pursuant to this Section 9(d) (x) on more than one (1) occasion in any two (2) month period, or (y) if such deferral would defer an Installment Amount beyond the Maturity Date.

**(10) Reservation of Shares.**

(a) The Company shall have sufficient authorized and unissued shares of Common Stock for each of the Series B Preferred Shares equal to 150% of the number of shares of Common Stock necessary to effect the conversion at the Conversion Rate (without regard to any limitations herein on any such conversion) with respect to the Conversion Amount of each such Series B Preferred Share as of the Issuance Date. The Company shall, so long as any of the Series B Preferred Shares are outstanding, take all reasonable action necessary to reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversions of the Series B Preferred Shares, such number of shares of Common Stock as shall from time to time be necessary to effect the conversion of all of the Series B Preferred Shares then outstanding (with the actions set forth in Section 10(b) be deemed reasonable and necessary); provided that at no time shall the number of shares of Common Stock so reserved shall at no time be less than 150% of the number of shares of Common Stock for which the Series B Preferred Shares are at any time convertible (without regard to any limitations on conversions) (the “**Required Reserve Amount**”). The initial number of shares of Common Stock reserved for conversions of the Series B Preferred Shares and each increase in the number of shares so reserved shall be allocated pro rata among the Holders based on the number of Series B Preferred Shares held by each Holder at the time of issuance of the Series B Preferred Shares or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event a Holder shall sell or otherwise transfer any of such Holder’s Series B Preferred Shares, each transferee shall be allocated a pro rata portion of the number of reserved shares of Common Stock reserved for such transferor. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Series B Preferred Shares (other than pursuant to a transfer of Series B Preferred Shares in accordance with the immediately preceding sentence) shall be allocated to the remaining Holders of Series B Preferred Shares, pro rata based on the number of Series B Preferred Shares then held by such Holders.

(b) Insufficient Authorized Shares. If at any time while any of the Series B Preferred Shares remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Series B Preferred Shares at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall promptly take all reasonable action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Series B Preferred Shares then outstanding (with the actions set forth in this Section 10(b) be deemed reasonable and necessary). Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than ninety (90) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its reasonable best efforts to solicit its stockholders’ approval of such increase in

authorized shares of Common Stock and to cause the Board to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if at any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C.

(11) Voting Rights. Except as required by applicable law, the Series B Preferred Shares shall not have any voting rights.

(12) Equal Treatment of Holders. No consideration shall be offered or paid to any of the Holders to amend or waive or modify any provision of the Series B Preferred Shares or the Warrants, unless the same consideration (other than the reimbursement of legal fees) is also offered to all of the Holders. This provision constitutes a separate right granted to each of the Holders by the Company and shall not in any way be construed as the Holders acting in concert or as a group with respect to the purchase, disposition or voting of securities or otherwise.

(13) Negative Covenants. Until all of the Series B Preferred Shares have been converted, redeemed or otherwise satisfied in accordance with their terms, the Company shall not, and the Company shall not permit any of its Subsidiaries to, without the prior written consent of the Required Holders, directly or indirectly:

(a) incur or guarantee, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness;

(b) allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, "Liens") other than Permitted Liens;

(c) encumber or allow any Liens on, any of its copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, patent applications and like protections, including improvements, divisions, continuations, renewals, reissues, extensions, and continuations-in-part of the same, trademarks, service marks and, to the extent permitted under applicable law, any applications therefor, whether registered or not, and the goodwill of the business of the Company and its Subsidiaries connected with and symbolized thereby, know-how, operating manuals, trade secret rights, rights to unpatented inventions, and any claims for damage by way of any past, present, or future infringement of any of the foregoing, other than Permitted Liens;

(d) redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness, whether by way of payment in respect of principal of (or premium, if any) or

interest on, such Indebtedness if at the time such payment is due or is otherwise made or, after giving effect to such payment, an event constituting, or that with the passage of time and without being cured would constitute, a Triggering Event has occurred and is continuing;

(e) other than with respect to the Series B Preferred Shares in accordance with the terms of the Certificate of Designations or the repurchase of any Equity Interests from consultants and other service providers to the Company as of the Subscription Date and from directors, officers and employees, in each case, in connection with the termination of such person's applicable relationship with the Company, redeem or repurchase any of its Equity Interests (except on a pro rata basis among all holders thereof);

(f) pay any cash dividend or distribution on any Equity Interest of the Company or of its Subsidiaries;

(g) make, any material change in the nature of its business as described in the Company's SEC Documents (as defined in the Securities Purchase Agreement);

(h) enter into, renew, extend or be a party to, any transaction or series of related transactions with an aggregate value in excess of \$500,000 (including, without limitation, the purchase, sale, lease, transfer or exchange of property or assets of any kind or the rendering of services of any kind) with any Affiliate, except in the ordinary course of business in a manner and to an extent consistent with past practice or otherwise necessary or desirable for the prudent operation of its business, in each case, for fair consideration and on terms no less favorable to it or its Subsidiaries than would be obtainable in a comparable arm's length transaction with a Person that is not an Affiliate thereof;

(i) issue or sell any rights, warrants or options to subscribe for or purchase Common Stock or directly or indirectly convertible into or exchangeable or exercisable for Common Stock at a price which varies or may vary with the market price of the Common Stock, including by way of one or more reset(s) to any fixed price unless the conversion, exchange or exercise price of any such security cannot be less than the then applicable Conversion Price; or

(j) create (by reclassification or otherwise), or authorize the creation of, or issue or obligate itself to issue additional or other capital stock or securities exchangeable for or convertible or exercisable into capital stock that is Pari Passu Stock or ranks senior to the Series B Preferred Shares in respect of the preferences as to distributions, the payment of dividends and payments upon a Liquidation Event.

**(14) Affirmative Covenants.** Until all of the Series B Preferred Shares have been converted, redeemed or otherwise satisfied in accordance with their terms, the Company shall, unless otherwise agreed to by the Required Holders:

(a) maintain on deposit unrestricted cash in an aggregate amount equal to not less than the lower of (i) \$3,500,000 and (ii) the Conversion Amount that remains outstanding as of the applicable date of determination; and

(b) maintain its existence as a Delaware corporation.

**(15) Vote to Change the Terms of or Issue Series B Preferred Shares.** In addition to any other rights provided by law, except where the vote or written consent of the holders of a greater number of shares is required by law or by another provision of the Certificate of Incorporation, the affirmative vote at a meeting duly called for such purpose or the written consent without a meeting of the Required Holders, voting together as a single class, shall be required before the Company may: (a) amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Shares, regardless of whether any such action shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise; (b) increase or decrease (other than by conversion) the authorized number of shares of Series B Preferred Shares; (c) amend or waive any provision of the Certificate of Designations with respect to the Series B Preferred Shares or (d) circumvent a right of the Series B Preferred Shares; provided, that in no event shall the consent of any Holders be required in connection with any Liquidation Event or Fundamental Transaction or in connection with the proposals (other than the Stockholder Approval) included in the proxy statement to be filed in connection with the 2017 annual meeting of stockholders of the Company; provided, further, that any such amendment or waiver that complies with the foregoing but that disproportionately, materially and adversely affects the rights and obligations of any Holder relative to the comparable rights and obligations of the other Holders shall require the prior written consent of such adversely affected Holder. Any amendment or waiver to this Certificate of Incorporation made in conformity with the provisions of this Section 15 shall be binding on all Holders. No such amendment or waiver shall be effective to the extent that it applies to less than all of the Holders.

**(16) General Provisions.**

(a) In addition to the above provisions with respect to Series B Preferred Shares, such Series B Preferred Shares shall be subject to and be entitled to the benefit of the provisions set forth in the Certificate of Incorporation of the Company with respect to preferred stock of the Company generally; provided, however, that in the event of any conflict between such provisions, the provisions set forth in this Certificate of Designations shall control.

(b) Any Series B Preferred Shares which are converted, repurchased or redeemed shall be automatically and immediately cancelled and shall not be reissued, sold or transferred.

(c) Whenever notice is required to be given under this Certificate of Designations, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement.

(d) Whenever any payment of cash is to be made by the Company to any Person pursuant to this Certificate of Designations, such payment shall be made in lawful money of the United States of America by a check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing (which address, in the case of each of the Buyers, shall initially be as set forth on the

Schedule of Buyers attached to the Securities Purchase Agreement); provided, that a Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with no less than two (2) Business Days prior written notice setting out such request and such Holder's wire transfer instructions. Whenever any amount expressed to be due by the terms of this Certificate of Designations is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day. Any amount of Stated Value or other amounts due under the Transaction Documents which is not paid within three (3) Business Days of the time such amount is due shall result in a late charge being incurred and payable by the Company in an amount equal to interest on such amount at the rate of twelve percent (12.0%) per annum from the date such amount was due until the same is paid in full ("**Late Charge**").

(17) Governing Law; Jurisdiction; Jury Trial. This Certificate of Designations shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Certificate of Designations shall be governed by, the internal laws of the State of Delaware, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Delaware or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Delaware. The Company and each Holder hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address it set forth on the signature page hereto and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **THE COMPANY AND EACH HOLDER HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS CERTIFICATE OF DESIGNATIONS OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(18) Lost or Stolen Certificates. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of any Series B Preferred Stock Certificates representing the Series B Preferred Shares, and, in the case of loss, theft or destruction, of an indemnification undertaking by such Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of the Series B Preferred Stock Certificate(s), the Company shall execute and deliver new preferred stock certificate(s) of like tenor and date; provided, however, the Company shall not be obligated to re-issue preferred stock certificates if such Holder contemporaneously requests the Company to convert such Series B Preferred Shares into Common Stock.

**(19) Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief.** The remedies provided in this Certificate of Designations shall be cumulative and in addition to all other remedies available under this Certificate of Designations, at law or in equity (including a decree of specific performance and/or other injunctive relief). No remedy contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy. Nothing herein shall limit a Holder's right to pursue actual damages for any failure by the Company to comply with the terms of this Certificate of Designations. The Company covenants to each Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by such Holder thereof and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holders and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Holders shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

**(20) Construction.** This Certificate of Designations shall be deemed to be jointly drafted by the Company and all Holders and shall not be construed against any person as the drafter hereof.

**(21) Failure or Indulgence Not Waiver.** No failure or delay on the part of a Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

**(22) Transfer of Series B Preferred Shares.** A Holder may assign some or all of the Series B Preferred Shares and the accompanying rights hereunder held by such Holder without the consent of the Company; provided that such assignment is in compliance with applicable securities laws. Notwithstanding the foregoing, in no event shall any Holder that is an officer or director of the Company, or a Person that is controlled by an officer or director of the Company be permitted to transfer any of its Series B Preferred Shares prior to the time the Company obtains Stockholder Approval. Holders shall have the right to transfer and to exercise rights with respect to fractional Series B Preferred Shares and any redemptions of Series B Preferred Shares by the Company shall be made calculating the number of applicable Series B Preferred Shares to one-one thousandth of a Series B Preferred Share.

**(23) Series B Preferred Share Register.** The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to the Holders), a register for the Series B Preferred Shares, in which the Company shall record the name and address of the persons in whose name the Series B Preferred Shares have been issued, as well as the name and address of each transferee. The Company may treat the person in whose name any Series B Preferred Share is registered on the register as the owner and holder thereof for all purposes, notwithstanding any notice to the contrary, but in all events recognizing any properly made transfers.

(24) **Disclosure.** Upon receipt or delivery by the Company of any notice in accordance with the terms of this Certificate of Designations, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries, the Company shall, unless any provision of any Transaction Document provides otherwise with respect to the receipt or delivery of a particular notice in accordance with the terms and conditions of the Transaction Documents, within two (2) Business Days after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holders contemporaneously with delivery of such notice, and in the absence of any such indication, the Holders shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries. For purposes of this Section 24, public disclosure of any information by a stockholder of the Company (including any filing pursuant to Section 13 or Section 16 of the Exchange Act) shall satisfy the requirement that such information be publicly disclosed by the Company.

(25) **Certain Defined Terms.** For purposes of this Certificate of Designations, Preferences and Rights of Series B Preferred Shares of the Company (this “**Certificate of Designations**”) the following terms shall have the following meanings:

(a) “**Affiliate**” shall have the meaning ascribed to such term in Rule 405 of the Securities Act.

(b) “**Allocation Percentage**” means a fraction, the numerator of which is the number of Series B Preferred Shares issued to a given Holder on the Issuance Date and the denominator of which is the aggregate amount of all Series B Preferred Shares issued by the Company on the Issuance Date.

(c) “**Approved Stock Plan**” means any employee benefit plan which has been approved by the Board, pursuant to which the Company’s securities may be issued to any employee, officer, director or consultant for services provided to the Company.

(d) “**Attribution Parties**” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by such Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of such Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with such Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with such Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively such Holder and all other Attribution Parties to the applicable Maximum Percentage.

(e) **“Bloomberg”** means Bloomberg Financial Markets.

(f) **“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.

(g) **“Change of Control”** means any Fundamental Transaction other than (A) any reorganization, recapitalization or reclassification of the Common Stock in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company, (C) resulting from an issuance of securities by the Company pursuant to the Transaction Documents or (D) resulting from one or more bona fide transactions the primary purpose of which is to raise capital; provided, however, that no Subject Entity party to such bona fide transaction acquires either (1) 50% or more of the outstanding shares of Common Stock, or (2) beneficial ownership (as defined in Rule 13d-3 under the Exchange Act) of 50% or more of the outstanding shares of Common Stock.

(h) **“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 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 in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets 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 Company and the applicable Holder. If the Company and such Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 5(c)(iii). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(i) “**Company Installment Conversion Price**” means, with respect to the applicable Installment Date or other applicable date of determination, that price which shall be the lowest of (i) the then applicable Conversion Price, (ii) 85% of the arithmetic average of the three (3) lowest Weighted Average Prices of the Common Stock during the ten (10) consecutive Trading Day period ending on the Trading Day immediately preceding the applicable Installment Date or other date of determination and (iii) 85% of the Weighted Average Price of the Common Stock on the Trading Day immediately preceding the applicable Installment Date or other date of determination.

(j) “**Company Pre-Installment Conversion Price**” means, with respect to any Company Installment Notice Date or other applicable date of determination, that price which shall be the lowest of (i) the then applicable Conversion Price, (ii) 85% of the arithmetic average of the three (3) lowest Weighted Average Prices of the Common Stock during the ten (10) consecutive Trading Day period ending on the Trading Day immediately preceding the applicable Company Installment Notice Date or other date of determination and (iii) 85% of the Weighted Average Price of the Common Stock on the Trading Day immediately preceding the applicable Company Installment Notice Date or other date of determination.

(k) “**Common Stock**” means (i) the Company’s shares of Common Stock, par value \$0.0001 per share and (ii) any stock capital into which such Common Stock shall have been changed or any stock capital resulting from a reorganization, recapitalization or reclassification of such Common Stock.

(l) “**Contingent Obligation**” means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(m) “**Conversion Amount**” means, for each Series B Preferred Share, the sum of (A) the Stated Value, (B) accrued and unpaid dividends, if any, with respect to such Stated Value and (C) accrued and unpaid Late Charges, if any, with respect to such Stated Value and dividends, if any.

(n) “**Conversion Price**” means \$2.67, subject to adjustment as provided herein.

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

(p) “**Electing Holder**” means such Holder who has elected to be subject to the 9.99% Maximum Percentage by so indicating on the Schedule of Buyers attached to the Securities Purchase Agreement or by otherwise delivering written notice of such election to the Company.

(q) “**Eligible Market**” means the Principal Market, The New York Stock Exchange, Inc., the NYSE MKT, The NASDAQ Global Select Market or The NASDAQ Capital Market.

(r) “**Equity Conditions**” means each of the following conditions: (i) on each day during Equity Conditions Measuring Period, all shares of Common Stock issuable pursuant to the terms of this Certificate of Designations (without regard to any restriction or limitation on conversion as set forth herein), including, without limitation, the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the applicable Company Conversion or Mandatory Conversion, as applicable, requiring the satisfaction of the Equity Conditions, shall be either (x) issuable without restrictive legends and shall be eligible for sale without restriction or limitation pursuant to Rule 144 of the Securities Act and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereto) or Rule 3(a)(9) of the Securities Act and without the need for registration under any applicable federal or state securities laws or (y) be eligible for sale or resale without restriction or limitation pursuant to an effective registration statement; (ii) on each day during the applicable Equity Conditions Measuring Period, the Common Stock is designated for quotation on the Principal Market or any other Eligible Market and shall not have been suspended from trading on such exchange or market (other than suspensions of not more than two (2) days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by such exchange or market have been threatened, commenced or pending either (A) in writing by such exchange or market or (B) by falling below the then effective minimum listing maintenance requirements of such exchange or market; (iii) during the applicable Equity Conditions Measuring Period, the Company shall have delivered all shares of Common Stock pursuant to the terms of this Certificate of Designations to the holders thereof on a timely basis as set forth in Section 5(c) hereof; (iv) the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the applicable Company Conversion or Mandatory Conversion, as applicable, requiring the satisfaction of the Equity Conditions may be issued in full without violating Section 5(e) hereof and the rules or regulations of the Principal Market or any other applicable Eligible Market; (v) during the applicable Equity Conditions Measuring Period, the Company shall not have failed to timely make any payments within five (5) Business Days of when such payment is due pursuant to any Transaction

Document; (vi) during the applicable Equity Conditions Measuring Period, there shall not have occurred either (A) the public announcement of a pending, proposed or intended Fundamental Transaction which has not been abandoned, terminated or consummated or (B) a Triggering Event; (vii) the Company shall have no knowledge of any fact that would cause all shares of Common Stock issued and issuable pursuant to this Certificate of Designations, including, without limitation, the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the applicable Company Conversion or Mandatory Conversion, as applicable, requiring the satisfaction of the Equity Conditions, not to be eligible for sale without restriction or limitation and without the need for registration under any applicable federal or state securities laws (other than an effective and unqualified registration statement); (viii) such Holder shall not be in possession of any material, nonpublic information regarding the Company or any of its Subsidiaries received from the Company, any Subsidiary or any of their respective agents, employees or Affiliates acting, directly or indirectly, at the direction of the Company, if the event requiring the satisfaction of the Equity Conditions is (A) a Company Conversion, on each of the last ten (10) days during the applicable Equity Conditions Measuring Period, or (B) a Mandatory Conversion, on each day during the applicable Mandatory Conversion Measuring Period; (ix) the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the applicable Company Conversion or Mandatory Conversion, as applicable, requiring the satisfaction of the Equity Conditions are duly authorized and listed and eligible for trading without restriction on an Eligible Market; (x) if the event requiring the satisfaction of the Equity Conditions is (A) a Company Conversion, the daily dollar trading volume of the Common Stock as reported by Bloomberg shall be at least \$200,000 on at least ten (10) Trading Days, including all three (3) consecutive Trading Days immediately preceding the applicable date of determination, during the Equity Conditions Measuring Period or (B) a Mandatory Conversion, the daily dollar trading volume of the Common Stock as reported by Bloomberg shall be at least \$200,000 on each of the ten (10) Trading Days immediately preceding the applicable date of determination during the Mandatory Conversion Measuring Period; and (xi) if the event requiring the satisfaction of the Equity Conditions is a Company Conversion, the Weighted Average Price of the Common Stock exceeds \$1.50 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) on at least ten (10) Trading Days, including all three (3) consecutive Trading Days immediately preceding the applicable date of determination, during the Equity Conditions Measuring Period.

(s) **“Equity Conditions Measuring Period”** means each day during the period beginning twenty one (21) Trading Days prior to the applicable date of determination and ending on and including the applicable date of determination.

(t) **“Equity Conditions Failure”** means that on the applicable date of determination the Equity Conditions have not been satisfied (or waived in writing by such Holder).

(u) **“Equity Interests”** means (a) all shares of capital stock (whether denominated as common capital stock or preferred capital stock), equity interests, beneficial, partnership or membership interests, joint venture interests, participations or other ownership or profit interests in or equivalents (regardless of how designated) of or in a Person (other than an individual), whether voting or non-voting and (b) all securities convertible into or exchangeable for any of the foregoing and all warrants, options or other rights to purchase, subscribe for or otherwise acquire any of the foregoing, whether or not presently convertible, exchangeable or exercisable.

(v) **“Exchange Cap Period”** means a period beginning on the delivery of a Conversion Notice to the Company by a Holder which the Company cannot honor due to the Exchange Cap, and ending on the earlier to occur of (i) a subsequent delivery to the Company by such Holder of a Conversion Notice which the Company cannot honor due to the Exchange Cap and (ii) 4:00:00 p.m., New York time (or such other time as the Principal Market or other applicable Eligible Market publicly announces is the official close of trading) on the date of such Holder’s attempted conversion.

(w) **“Exchange Cap Weighted Average Price”** means, for any security, the dollar volume-weighted average price for such security on the Principal Market during the applicable Exchange Cap Period, 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 applicable Exchange Cap Period, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such period, 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 in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.) during such period. If the Exchange Cap Weighted Average Price cannot be calculated for a security on any of the foregoing bases, the Exchange Cap Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the applicable Holder. If the Company and such Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 5(c)(iii) with the term “Exchange Cap Weighted Average Price” being substituted for the term “Conversion Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(x) **“Excluded Securities”** means any Common Stock issued or issuable or deemed to be issued in accordance with Section 5(g) hereof by the Company: (A) under any Approved Stock Plan; (B) with respect to the Series B Preferred Shares pursuant to the terms of this Certificate of Designations; provided, that the Certificate of Designations is not amended, modified or changed on or after the Subscription Date; (C) upon the exercise of the Warrants; provided that the

Warrants are not amended, modified or changed on or after the Subscription Date; (D) upon conversion, exercise or exchange of any Options or Convertible Securities which are outstanding on the day immediately preceding the Subscription Date, provided that such issuance of Common Stock upon exercise of such Options or Convertible Securities is made pursuant to the terms of such Options or Convertible Securities in effect on the date immediately preceding the Subscription Date and such Options or Convertible Securities are not amended, modified or changed on or after the Subscription Date; (E) in connection with obtaining commercially reasonable, arms-length debt financing from any bank, financial institution or institutional lender approved by the Board of Directors of the Company in good faith, (F) in connection with any acquisitions (whether by merger, consolidation, purchase of equity, purchase of assets, reorganization or otherwise), mergers, consolidations, reorganizations or similar transactions by Company or any of its Subsidiaries the terms of which are approved by a majority of the disinterested directors of the Company, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, (G) in connection with (i) joint venture, licensing or development activities, (ii) distribution, supply or manufacture of the Company's products or services or (iii) any other arrangements involving business partners of the Company that, in each case, are approved by a majority of the disinterested directors of the Company, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, (H) in connection with the sale of securities to Key Group Development, or an affiliate thereof, with an aggregate purchase price not to exceed \$1,000,000, or (I) with respect to shares of the Company's Series A Junior Participating Preferred Stock issued or issuable pursuant to the Company's poison pill or rights plan then in effect; provided that any Common Stock issued or issuable (or deemed to be issued in accordance with Section 5(g)(i)) by the Company to consultants pursuant to the foregoing clause (A) and/or pursuant to the foregoing clauses (E), (F) and/or (G), which, when combined with all Common Stock issued or issuable (or deemed to be issued in accordance with Section 5(g)(i)) by the Company previously issued to consultants pursuant to the foregoing clause (A) and/or pursuant to the foregoing clauses (E), (F) and/or (G), exceeds 600,000 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) shall not constitute Excluded Securities hereunder.

(y) "**Fundamental Transaction**" means (i) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (a) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (b) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its "significant subsidiaries" (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (c) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more

Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (1) 50% of the outstanding shares of Common Stock, (2) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (3) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (d) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby such Subject Entities, individually or in the aggregate, acquire, either (1) at least 50% of the outstanding shares of Common Stock, (2) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (3) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (e) reorganize, recapitalize or reclassify its Common Stock, (ii) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (a) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (b) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (c) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (iii) directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner

otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(z) “**GAAP**” means United States generally accepted accounting principles, consistently applied.

(aa) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(bb) “**Indebtedness**” of any Person means, without duplication (i) all indebtedness for borrowed money, (ii) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including (without limitation) “capital leases” in accordance with GAAP (other than trade payables entered into in the ordinary course of business), (iii) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (iv) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (v) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (vi) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a capital lease, (vii) all indebtedness referred to in clauses (i) through (vi) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (viii) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (i) through (vii) above.

(cc) “**Installment Amount**” means with respect to each Installment Date, an amount equal to the sum of (i) with respect to each Holder the aggregate Stated Value of the lesser of (A) such Holder’s Allocation Percentage of 1,739.53 Series B Preferred Shares (rounded up to the nearest thousandth of a Series B Preferred Share) (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) and (B) the number of Series B Preferred Shares held by such Holder on such Installment Date, (ii) any Deferral Amount deferred by such Holder pursuant to Section 9(d) and included in such Installment Amount

by such Holder, (iii) any accrued and unpaid dividends with respect to such Series B Preferred Shares, if any, and (iv) and accrued and unpaid Late Charges, if any, with respect to such Principal and dividends, if any, as any such Installment Amount for such Holder may be reduced pursuant to the terms hereof, whether upon conversion, redemption or otherwise. In the event a Holder shall sell or otherwise transfer or assign any portion of such Holder's Series B Preferred Shares, the transferee shall be allocated a pro rata portion of each unpaid Installment Amount hereunder.

(dd) "**Installment Balance Conversion Shares**" means, for any Installment Date, a number of shares of Common Stock equal to (i) the Post-Installment Conversion Shares for such date minus (ii) the amount of any Pre-Installment Conversion Shares delivered in respect of the applicable Installment Date. In the event that the amount of Pre-Installment Conversion Shares exceeds the Post-Installment Conversion Shares for such date (such excess, as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the delivery thereof to such Holder, the "**Installment Conversion Shares Excess**"), the Installment Balance Conversion Shares shall equal zero (0) for such date and the number of Pre-Installment Conversion Shares payable on the next Installment Pre-Payment Date shall be reduced by such Installment Conversion Shares Excess; provided that in connection with the final Installment Date, the Installment Balance Conversion Shares shall equal the actual number (whether positive or negative) obtained through the application of the formula above in this clause (z) and, if a negative number, then each Holder shall, at its sole option, either (I) forfeit the applicable number of shares of Common Stock underlying the applicable Installment Conversion Shares Excess to the Company on the Maturity Date or (II) pay to the Company cash by wire transfer of immediately available funds pursuant to the Company's written wire instruction in an amount equal to the product obtained by multiplying the applicable Installment Conversion Shares Excess and the applicable Company Installment Conversion Price with respect to the last Installment Date hereunder.

(ee) "**Installment Date**" means each of December 15, 2017, January 16, 2018, February 15, 2018, March 15, 2018, April 16, 2018, May 15, 2018, June 15, 2018, July 16, 2018 and August 15, 2018.

(ff) "**Lead Investor**" means Hudson Bay Master Fund Ltd.

(gg) "**Liquidation Event**" means the voluntary or involuntary liquidation, dissolution or winding up of the Company or such Subsidiaries the assets of which constitute all or substantially all of the assets of the business of the Company and its Subsidiaries taken as a whole, in a single transaction or series of transactions, or adoption of any plan for the same.

(hh) "**Non-Electing Holder**" means any Holder who is not an Electing Holder.

(ii) “**Option Value**” means the value of an Option based on the Black and Scholes Option Pricing model obtained from the “OV” function on Bloomberg determined as of (A) the Trading Day prior to the public announcement of the issuance of the applicable Option if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the applicable Option as of the applicable date of determination, (ii) an expected volatility equal to the greater of 75% and the 100 day volatility obtained from the HVT function on Bloomberg as of (A) the Trading Day immediately following the public announcement of the applicable Option if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iii) the underlying price per share used in such calculation shall be the highest Weighted Average Price of the Common Stock during the period beginning on the Trading Day prior to the execution of definitive documentation relating to the issuance of the applicable Option and ending on (A) the Trading Day immediately following the public announcement of such issuance, if the issuance of such Option is publicly announced or (B) the Trading Day immediately following the issuance of the applicable Option if the issuance of such Option is not publicly announced, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(jj) “**Options**” means any rights, warrants or options to subscribe for or purchase (i) shares of Common Stock or (ii) Convertible Securities.

(kk) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common capital or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(ll) “**Permitted Indebtedness**” means (i) trade payables incurred in the ordinary course of business consistent with past practice, (ii) Permitted Indebtedness set forth on Schedule 3(zz), attached to the Securities Purchase Agreement as in effect on the Subscription Date and (iii) Indebtedness secured by Permitted Liens.

(mm) “**Permitted Liens**” means (i) any Lien for taxes not yet due or delinquent or being contested in good faith by appropriate proceedings for which adequate reserves have been established in accordance with GAAP, (ii) any statutory Lien arising in the ordinary course of business by operation of law with respect to a liability that is not yet due or delinquent, (iii) any Lien created by operation of law, such as materialmen’s liens, mechanics’ liens and other similar liens, arising in the ordinary course of business with respect to a liability

that is not yet due or delinquent or that are being contested in good faith by appropriate proceedings, (iv) Liens (A) upon or in any equipment acquired or held by the Company or any of its Subsidiaries to secure the purchase price of such equipment or Indebtedness incurred solely for the purpose of financing the acquisition or lease of such equipment, or (B) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment, (v) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clause (iv) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced does not increase, (vi) leases or subleases and licenses and sublicenses granted to others in the ordinary course of the Company's business, (vii) Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of custom duties in connection with the importation of goods, and (viii) Liens arising from judgments, decrees or attachments in circumstances not constituting a Triggering Event under Section 6(a)(viii).

(nn) "**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.

(oo) "**Post-Installment Conversion Shares**" means, for any Installment Date and without taking into account the delivery of any Pre-Installment Conversion Shares, that number of shares of Common Stock equal to the applicable Company Conversion Amount on such Installment Date divided by the Company Installment Conversion Price as in effect on the applicable Installment Date, rounded up to the nearest whole share of Common Stock.

(pp) "**Principal Market**" means The NASDAQ Global Market.

(c) "**Redemption Date**" means, collectively, the Triggering Event Redemption Date, the Change of Control Redemption Date, the Installment Dates, each of the foregoing, individually, a Redemption Date.

(qq) "**Redemption Prices**" means, collectively, the Triggering Event Redemption Price, the Change of Control Redemption Price, the Company Installment Redemption Price, and any other redemption price set forth herein (including, in each case, any interest and damages thereon), each of the foregoing, individually, a Redemption Price.

(rr) "**Redemption Notices**" means, collectively, the Notices of Redemption at Option of Holder, the Change of Control Redemption Notices and any other redemption notices set forth herein, each of the foregoing, individually, a Redemption Notice.

- (tt) “**Registration Statement**” means the Company’s Registration Statement on Form S-3 (File number 333-217034).
- (uu) “**Required Holders**” means the Holders representing at least a majority of the aggregate Series B Preferred Shares then outstanding.
- (vv) “**SEC**” means the United States Securities and Exchange Commission.
- (ww) “**Securities Act**” means the Securities Act of 1933, as amended.
- (xx) “**Securities Purchase Agreement**” means the Securities Purchase Agreement, dated as of the Subscription Date, by and among the Company and the investors referred to therein.
- (yy) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Eligible Market with respect to the Company’s Common Stock as in effect on the date of delivery of the applicable Conversion Notice.
- (zz) “**Stated Value**” means \$1,000.
- (aaa) “**Stockholder Approval**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.
- (bbb) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.
- (ccc) “**Subscription Date**” means August 16, 2017.
- (ddd) “**Subsidiaries**” means any joint venture or entity in which the Company, directly or indirectly, owns capital stock or an equity or similar interest, including any subsidiaries formed or acquired after the Subscription Date.
- (eee) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Required Holders, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Required Holders, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.
- (fff) “**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 is suspended from trading during the entire 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).

(ggg) **“Transaction Documents”** means this Certificate of Designations, the Securities Purchase Agreement and the Warrants.

(hhh) **“Triggering Event Conversion Price”** means, with respect to any Triggering Event Conversion, that price which shall be the lowest of (i) the Conversion Price then in effect, (ii) 75% of the lowest Weighted Average Price of the Common Stock during the twenty (20) consecutive Trading Day period ending on the Trading Day immediately preceding the date of the applicable Triggering Event Conversion (such Weighted Average Prices to be appropriately adjusted for any share dividend, share split, share combination, reclassification or similar transaction during such twenty (20) consecutive Trading Day period) and (iii) 75% of the Weighted Average Price of the Common Stock on the date of the applicable Triggering Event Conversion.

(iii) **“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 such 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 such 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 in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets 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 Company and the applicable Holder. If the Company and such Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 5(c)(iii) with the term “Weighted Average Price” being substituted for the term “Conversion Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(v) **“Warrants”** means the warrants to purchase Common Stock issued in connection with the Series B Preferred Shares on the Issuance Date and shall include all warrants issued in exchange therefor or replacement thereof.

\* \* \* \* \*

IN WITNESS WHEREOF, the Company has caused this Certificate of Designations to be duly executed, as of the 21st day of August, 2017.

**ALTIMMUNE, INC.**

By: /s/ William Enright

Name: William Enright

Title: President and Chief Executive Officer

EXHIBIT I

**ALTIMMUNE, INC.**

CONVERSION NOTICE

Reference is made to the Certificate of Designations, Preferences and Rights of Series B Convertible Preferred Stock of Altimune, Inc. (the "**Certificate of Designations**"). In accordance with and pursuant to the Certificate of Designations, the undersigned hereby elects to convert the number of shares of Series B Convertible Preferred Stock, par value \$0.0001 per share (the "**Series B Preferred Shares**"), of Altimune, Inc., a Delaware corporation (the "**Company**"), indicated below into shares of Common Stock, par value \$0.0001 per share (the "**Common Stock**"), of the Company, as of the date specified below.

Date of Conversion: \_\_\_\_\_

Number of Series B Preferred Shares to be converted: \_\_\_\_\_

Stock certificate no(s). of Series B Preferred Shares to be converted: \_\_\_\_\_

Tax ID Number (If applicable): \_\_\_\_\_

Please confirm the following information: \_\_\_\_\_

Conversion Price: \_\_\_\_\_

Please check the following box if the Conversion Price is being determined by:

Triggering Event Conversion Price:

Number of shares of Common Stock to be issued: \_\_\_\_\_

Please issue the Common Stock into which the Series B Preferred Shares are being converted to the Holder, or for its benefit, as follows:

Check here if requesting delivery as a certificate to the following name and to the following address:

Issue to: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Check here if requesting delivery by Deposit/Withdrawal at Custodian as follows:

DTC Participant: \_\_\_\_\_

DTC Number: \_\_\_\_\_

Account Number: \_\_\_\_\_

Check here if requesting delivery by book-entry only registration through the DTC's Direct Registration System (DRS):

Issue to: \_\_\_\_\_  
\_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Authorization: \_\_\_\_\_

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

Title: \_\_\_\_\_

Dated:

Account Number (if electronic book entry transfer): \_\_\_\_\_

Transaction Code Number (if electronic book entry transfer): \_\_\_\_\_

Installment Amounts to be reduced and amount of reduction: \_\_\_\_\_

[NOTE TO HOLDER — THIS FORM MUST BE SENT CONCURRENTLY TO TRANSFER AGENT]

**ACKNOWLEDGMENT**

The Company hereby acknowledges this Conversion Notice and hereby directs Continental Stock Transfer & Trust Company to issue the above indicated number of shares of Common Stock in accordance with the Irrevocable Transfer Agent Instructions dated August , 2017 from the Company and acknowledged and agreed to by Continental Stock Transfer & Trust Company.

ALTIMMUNE, INC.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

August 21, 2017

Altimmune, Inc.  
19 Firstfield Road, Suite 200  
Gaithersburg, Maryland

Ladies and Gentlemen:

We are acting as counsel to Altimmune, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a prospectus supplement, dated August 16, 2017 (the "Prospectus Supplement"), to the prospectus, dated March 30, 2017, included as part of a registration statement (the "Registration Statement") on Form S-3 (No. 333-217034) relating to the offer and sale of (a) 15,656 shares of the Company's Series B Convertible Preferred Stock, par value \$0.0001 per share (the "Preferred Shares"), (b) the shares of the Company's common stock, par value \$0.0001 per share ("Common Stock") that may be issued upon conversion of the Preferred Shares (the "Conversion Shares"), (c) warrants to purchase shares of Common Stock (the "Warrants"), and (d) the shares of Common Stock that may be issued upon the exercise of the Warrants (the "Warrant Shares").

As such counsel, we have participated in the preparation of the Prospectus Supplement and have examined originals or copies of such documents, corporate records and other instruments as we have deemed relevant, including, without limitation: (i) the amended and restated certificate of incorporation of the Company as in effect on the date hereof and as amended to date; (ii) the bylaws of the Company, as in effect on the date hereof and as amended to date; (iii) the resolutions of the Board of Directors of the Company; (iv) the Placement Agency Agreement entered into between the Company and Piper Jaffray & Co.; (v) the form of the Warrants; (vi) the Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock, as filed with the Delaware Secretary of State on August 21, 2017 (the "Certificate of Designations"); (vii) the Securities Purchase Agreement, by and among the Company and each purchaser identified therein (the "Securities Purchase Agreement"); (viii) the Registration Statement, together with the exhibits filed as a part thereof and including any documents incorporated by reference therein; (ix) the Prospectus Supplement, including any documents incorporated by reference therein; and (x) such other certificates, statutes and other instruments and documents as we consider appropriate for purposes of the opinions hereafter expressed.

We have made such examination of law as we have deemed necessary to express the opinion contained herein. As to matters of fact relevant to this opinion, we have relied upon, and assumed without independent verification, the accuracy of certificates of public officials and officers of the Company. We have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as certified, facsimile or photostatic copies, and the authenticity of the originals of such copies.

Based upon the foregoing, and subject to the limitations, qualifications, exceptions and assumptions expressed herein, we are of the opinion, assuming no change in the applicable law or pertinent facts, that:

(a) The Preferred Shares have been duly authorized for issuance and, when sold, issued and paid for in accordance with the Securities Purchase Agreement, will be validly issued, fully paid and nonassessable.

(b) The Warrants have been duly authorized and, upon delivery of the consideration as provided in the Securities Purchase Agreement, will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms, subject, as to enforcement, to bankruptcy, insolvency, fraudulent conveyance, fraudulent transfer, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally and by general equitable principles (regardless of whether enforcement is sought in equity or at law), including, without limitation, principles regarding good faith and fair dealing (including the possible unavailability of specific performance or injunctive relief, concepts of materiality and reasonableness, and the discretion of the court before which a proceeding is brought).

(c) The Conversion Shares issuable upon conversion of the Preferred Shares have been duly authorized and, when issued and paid for in accordance with the provisions of the Preferred Shares as set forth in the Certificate of Designations as currently in effect, will be validly issued, fully paid and nonassessable.

(d) The Warrant Shares issuable upon exercise of the Warrants have been duly authorized and, when issued upon exercise of the Warrants in accordance with the terms thereof, will be validly issued, fully paid and nonassessable.

This opinion is limited in all respects to the General Corporation Law of the State of Delaware, and, as to the Warrants constituting valid and legally binding obligations of the Company, with respect to the laws of the State of New York, and we express no opinion as to the laws, statutes, rules or regulations of any other jurisdiction. The reference and limitation to the "General Corporation Law of the State of Delaware" includes all applicable Delaware statutory provisions of law and reported judicial decisions interpreting these laws.

We hereby consent to the filing of this opinion letter in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act as Exhibit 5.1 to the Company's Current Report on Form 8-K (and its incorporation by reference into the Registration Statement) and to the reference to our firm under the caption "Legal Matters" in the Prospectus Supplement. In giving the foregoing consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Proskauer Rose LLP



## Altimune Closes Series B Preferred Stock Offering

**GAITHERSBURG, MD, August 21, 2017** — Altimune, Inc. (Nasdaq: ALT), a clinical-stage immunotherapeutics company, today announced it has closed its offering of approximately 15,656 shares of Series B convertible preferred stock and warrants. The Company received approximately \$13.0 in net proceeds from the offering, after deducting the placement agent fee, an additional fee related to the Company's completed merger paid to the placement agent, and the Company's estimated offering expenses. Altimune intends to use the net proceeds from the offering for the continued advancement of development activities for its clinical-stage product pipeline, general corporate purposes, and strategic growth opportunities.

The investors in the offering include Novartis Venture Fund, HealthCap and Truffle Capital. Piper Jaffray & Co. acted as sole placement agent, and Proskauer Rose LLP represented Altimune, in connection with the Offering.

The offering was made pursuant to the Company's existing shelf registration statement on Form S-3 (File No. 333-217034), including a base prospectus, which was filed with the U.S. Securities and Exchange Commission on March 30, 2017 and declared effective by the Commission on April 6, 2017. The securities were offered by means of a prospectus supplement and accompanying prospectus, forming a part of the effective registration statement. A prospectus supplement related to the offering was filed with the SEC and is available at the SEC's website at <http://www.sec.gov>. Electronic copies of the preliminary prospectus supplement also may be obtained from Piper Jaffray & Co., Attention: Prospectus Department, 800 Nicollet Mall, J12S03, Minneapolis, MN 55401, telephone: (800) 747-3924, email: [prospectus@pjc.com](mailto:prospectus@pjc.com).

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

### About Altimune

Altimune is a clinical-stage immunotherapeutics company focused on the development of products to stimulate robust and durable immune responses for the prevention and treatment of disease and on the development of two next-generation anthrax vaccines that are intended to improve protection and safety while having favorable dosage and storage requirements compared to other anthrax vaccines. The company has two proprietary platform technologies, RespirVec and Densigen, each of which has been shown to activate the immune system in distinctly different ways than traditional vaccines.

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## Forward-Looking Statement

Any statements made in this press release relating to future financial or business performance, the completion of, or the use of proceeds, from the offering, conditions, plans, prospects, trends, or strategies and other financial and business matters, including without limitation, the prospects for commercializing or selling any product or drug candidates, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, when or if used in this press release, the words “may,” “could,” “should,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan,” “predict” and similar expressions and their variants, as they relate to Altimmune, Inc. (the “Company”) may identify forward-looking statements. The Company cautions that these forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Important factors that may cause actual results to differ materially from the results discussed in the forward looking statements or historical experience include risks and uncertainties, including risks relating to: realizing the benefits of the merger between Altimmune, Inc. and PharmAthene, Inc.; clinical trials and the commercialization of proposed product candidates (such as marketing, regulatory, product liability, supply, competition, dependence on third parties and other risks); the regulatory approval process; dependence on intellectual property; the Company’s BARDA contract and other government programs, reimbursement and regulation; and the lack of financial resources and access to capital to fund proposed operations. Further information on the factors and risks that could affect the Company’s business, financial conditions and results of operations are contained in the Company’s filings with the U.S. Securities and Exchange Commission, including under the heading “Risk Factors” in the Form 10-K filed March 14, 2017, Form 10-Q filed August 14, 2017 and in the Form 8-K filed on August 17, 2017, which are available at [www.sec.gov](http://www.sec.gov).

## Altimmune Contacts

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