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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

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

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



**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
(Exact name of registrant as specified in its charter)

**Nevada**

(State or other jurisdiction of  
incorporation or organization)

**000-55016**

(Commission File Number)

**26-0690857**

IRS Employer  
Identification No.)

**315 Montgomery Street, Suite 900**  
**San Francisco, CA**

(Address of Principal Executive Offices)

**94104**

(Zip Code)

**(408) 737-2734**

(Registrant's telephone number, including area code)

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
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act
  - 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))
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## Item 1.01 Entry into a Material Definitive Agreement.

### Binding Letters of Intent with Certain Convertible Debt Holders

On February 20, 2017, certain Binding Letters of Intent (the “Binding LOIs”) between Amaranthus BioScience Holdings, Inc. (the “Company”) and the majority of its convertible securities holders were released from escrow. Pursuant to the Binding LOIs, 100% of the holders of the Company’s Senior Secured Convertible Debentures agreed to Contingent Settlement Agreements for Senior Secured Debenture Holders. A majority in interest of the holders of Series E Convertible Preferred Stock representing 94% of said holders and a majority in interest of holders of the Series H Convertible Preferred Stock representing 93.9% of said holders agreed to Contingent Settlement Agreements for Convertible Preferred Stock Holders. The Binding LOIs outline the terms of modifications to the Senior Secured Convertible Notes, the Convertible Preferred Series E and Convertible Preferred Series H, and are contingent upon the achievement of certain milestones outlined in the modifications to the certificates of designation. The Binding LOIs are subject to definitive agreements. Forms of the Contingent Settlement Agreements for Senior Secured Debenture Holders, the Contingent Settlement Agreements for Convertible Series E Preferred Stock Holders and the Contingent Settlement Agreements for Convertible Series H Preferred Stock Holders are filed herewith as exhibits.

The following is a summary of the terms of the contingent modifications to the Senior Secured Convertible Debentures, the Convertible Preferred Series E (“Series E”) and Convertible Preferred Series H (“Series H”). The Company and the parties to the Binding LOIs have agreed:

- Certain conditions specified in the Binding LOIs must be met related to the injection of assets and funds into the Company, including a time frame for such investments and the requirement for fairness opinions under certain circumstances.
- Actions that must be taken by Avant Diagnostics, Inc. (“Avant”) (an entity which the Company owns certain shares of), with regards to raising capital and other corporate-related milestones;
- Conditions under which certain security held by the holders of the Senior Secured Convertible Debentures will be released by secured creditors, including the meeting of any two of the following funding events: (i) the Company successfully raising \$1.5 million; (ii) the raising of \$2.5 million for the Company’s subsidiary Cutanogen Corporation; (iii) the raising of \$1.5 million for Avant.
- The convertible debt of the Company shall be exchanged for 80% of the stated value into:
  - o (i) 40% of that principal amount into certain shares of Avant held by the Company, at market price between \$0.16/share subject to a floor price of \$0.12/share; and
  - o (ii) 40% of that principal amount, into a new convertible note issued by the Company which is non-interest bearing with nine (9) months maturity date.
- The Company’s Series E and Series H to be converted for 75% of the stated value, into:
  - o (i) 37.5% of that principal amount into shares of Avant held by the Company, at market price between \$0.16/share subject to a floor price of \$0.12/share;
  - o (ii) 37.5% of that principal amount, into a new convertible note issued by the Company, non-interest bearing with nine (9) months maturity date.
  - o All other classes of Preferred Stock in the Company are described below:
    - Series A Preferred Stock has been retired;
    - Series B Preferred Stock is convertible into 1,500,000 common shares;
    - Series C Preferred Stock is convertible into 750,000 shares;
    - Series D Preferred Stock has been retired;
    - Series F Preferred Stock is non-convertible, and described in Item 5.01 below;
    - Series G Preferred Stock has been retired.
- The shares of Avant and of the Company (the “Companies”) to be transferred to the Senior Secured Convertible Debenture holders, the Series E holder and the Series H holders can only be liquidated subject to certain prescribed limits:
  - o (i) the conversion, after a potential up-listing of the Companies to a national securities exchange of the amount that is permitted to be liquidated, at a conversion price using a market price format of 100% of the average price per share of the Company for the prior twelve (12) trading days, subject to a cap of 250% of the up-list price;

- o (ii) the commencement of trading generally restricted to earlier of when the Companies is trading at greater than 150% of the up-listing price or nine (9) months after the up-listing date;
- o (iii) the sale of shares of the Companies is limited to daily liquidation limits to enable a holder to orderly liquidate up to 25% of the holder's position over a four-month interval starting then, and for each subsequent 25% over the remaining four month intervals thereafter; and
- o (iv) the Companies having a right of first refusal for any proposed trade in excess of the daily liquidation limit, at a market price format.
- The Company will need to complete all the up-listing requirements including compliance with reporting requirements within nine (9) months, otherwise the Company's shares are not subject to restrictions and are free to trade.
- The Company's Cutanogen Corporation subsidiary will issue a new class of equity shares, such that the Company will retain 65% ownership of this subsidiary, with other shares of Cutanogen Corporation being given to the Company's debt holders.
  - o The Senior Secured Convertible Debenture holders will receive pari passu per dollar invested up 20% of Cutanogen Corporation;
  - o The Series E and Series H holders will receive pari passu per dollar invested up 15% of Cutanogen Corporation;
- The Senior Secured Convertible Debenture holders that are parties to these Binding LOIs have agreed to certain stand still periods during which they will not pledge, hypothecate, lien, sell, or transfer current debt or preferred equity to be exchanged.
- The Company has agreed to pay up to \$250,000 for legal expenses of convertible debt and preferred equity holders that are the subject of this restructuring.

The parties to these Binding LOI agreements are as follows:

#### SENIOR SECURED CONVERTIBLE DEBENTURE

- Anson Master Fund
- Delafield Investments
- Dominion Capital

#### SERIES E

- Dominion Capital
- Infusion 51a
- International Infusion
- Lincoln Park Capital
- Pinz Capital
- ZSP

#### SERIES H

- Anson Master Fund
- Delafield Investments
- International Infusion
- Infusion 51a
- US 1000
- Vivacitas Oncology

## Securities Purchase Agreement

On March 6, 2017, the Company entered into a Securities Purchase Agreement (“SPA”) with Amarantus Bioscience PTE, Ltd. (the “Investor”), pursuant to which the Investor purchased 250,000 shares of the Company’s Series F Preferred Stock (the “Series F Preferred Stock”) for \$25,000. The Investor is a corporation owned by Mr. Chan Heng Fai. This investment followed the execution of a non-binding Letter of Intent between the Company and SeD Biomedical Inc. (“SeD Biomedical”), a subsidiary of Singapore eDevelopment Limited. Mr. Chan Heng Fai is an Executive Director and the Chief Executive Officer of Singapore eDevelopment Limited. He is also a director and the sole shareholder of Hengfai Business Development Pte. Ltd, the controlling shareholder of Singapore eDevelopment Limited. Pursuant to the SPA, there has been a change in control of the Company, as described in Item 5.01 below.

The foregoing summary of the SPA does not purport to be complete and is qualified in its entirety by reference to the copy of the SPA filed as an exhibit hereto.

### **Item 3.02 Unregistered Sales of Equity Securities.**

The information set forth in Item 1.01 is incorporated by reference herein. The issuance of the Series F Preferred Stock described above was completed in accordance with the exemption provided by Section 4(a)(2) of the Securities Act of 1933, as amended.

### **Item 5.01 Changes in Control of Registrant.**

The information set forth in Items 1.01 and 3.02 are incorporated by reference herein. As of March 6, 2017, the Investor has acquired control of the Company. Pursuant to the SPA, the Investor now has the right to vote 250,000 shares of Series F Preferred Stock, which Series F Preferred Stock shall vote with the Company’s common stock and shall have voting power equal to 100,000 votes of common stock per share of Series F Preferred Stock, for a total number of votes equal to 25,000,000,000 shares of the Company’s common stock. Prior to this transaction, there were 78,790,093 shares of the Company’s common stock issued and outstanding.

In addition, possible votes were held by the holders of the Company’s Series C Convertible Preferred Stock, Series D Convertible Preferred Stock, Series E Convertible Preferred Stock, and Series H Convertible Preferred Stock issued and outstanding, as determined after taking into consideration a beneficial ownership limitation on certain classes of the Company’s stock. 750,000 shares of Series C Convertible Preferred Stock, 0 shares of Series D Convertible Preferred Stock, 8,791 shares of Series E Convertible Preferred Stock, 0 shares of Series G Convertible Preferred Stock and 6,085 shares of Series H Convertible Preferred Stock are issued and outstanding. Series C Convertible Preferred Stock entitles its holders to 1,500,000 votes in the aggregate, Series D Convertible Preferred Stock entitles its holder to 0 votes in the aggregate, Series E Preferred Stock entitles its holders to 46,688,606 votes in the aggregate (after taking into consideration certain applicable beneficial ownership limitations), Series H Preferred Stock entitles its holders to 23,737,495 votes in the aggregate (after taking into consideration the applicable beneficial ownership limitations) and one share of common stock entitles its holder to one vote per each share held. Holders of Series G Convertible Preferred Stock do not have the right to vote.

Thus, the outstanding voting power of the Company prior to the sale of the Series F Preferred Stock was 151,466,194 total votes (after taking into consideration the applicable beneficial ownership limitations on certain classes of the Company’s stock). Holders of the Company’s Series E and Series H Convertible Preferred Stock are entitled to a 100,000 vote multiplier per each share owned, up to a beneficial ownership limit of 9.99% and 4.99%, respectively. However, because the 100,000 vote multiplier would result in every holder of the Company’s Series E and Series H Convertible Preferred Stock beneficially owning an amount above the respective 9.99% or 4.99% threshold, no votes included in the calculation and determination of voting power are as a result of the vote multiplier.

Accordingly, the Investor now controls 99.3% of the currently voting securities of the Company. Mr. Chan, who controls Amarantus Bioscience PTE, Ltd. may also be deemed to control both the voting of the shares of Series F Preferred held by Amarantus Bioscience PTE, Ltd. and the voting of up to 20,000,000 shares of the Company’s common stock which could be issued to BMI Capital Partners International Ltd., which is a subsidiary of Singapore eDevelopment, upon the conversion of a convertible promissory note. Another entity Mr. Chan controls, Xpress Group International Limited has a convertible promissory note that can be converted into up 14,000,000 shares of the Company common stock, but conversion is limited on this convertible promissory note by a beneficial ownership limit covering all affiliates of up to 9.99% of the Company’s common stock.

The \$25,000 in consideration used by the Investor to purchase the Series F Preferred Stock came from the Investor’s working capital. As described in Item 5.02, four new directors were appointed to the Board pursuant the non-binding Letter of Intent entered into between the Company and SeD Biomedical.

**Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

On December 26, 2016, Dr. Joseph Rubinfeld, a member of the Board, passed away.

On February 23, 2017, the Board of Directors (the “Board”) appointed four new directors pursuant to a non-binding Letter of Intent the Company entered into with SeD Biomedical, increasing the number of Board members to eight. The four new members of the Board selected by SeD Biomedical pursuant to the non-binding Letter of Intent are Mr. Rongguo (Ronald) Wei, Mr. Steven Spence, Mr. Robert Trapp and Conn Flanigan.

At the present time, none of the four new directors appointed on February 23, 2017 have entered into any compensation arrangement with the Company, however, each of Mr. Wei and Mr. Trapp are employed by SeD Development Management, LLC, a subsidiary of Singapore eDevelopment Limited, and Mr. Flanigan serves in various director and officer positions with subsidiaries of Singapore eDevelopment. Mr. Spence is compensated by Dominick & Dickerman, LLC, where he serves as Managing Director. On October 7, 2016 the Company entered into an engagement agreement with the investment bank of Dominick and Dickerman, LLC for purposes of assisting the Company in coordinating the restructuring of its capital base (the “Engagement Agreement”). Pursuant to the Engagement Agreement, the Company has agreed to pay Dominick and Dickerman (i) 4% of the gross proceeds of any financing arranged by Dominick and Dickerman and (ii) 3% of the total consideration value of any merger, acquisition, joint venture or other business combination during the 12 month term of the Engagement Agreement. Either party to the Engagement Agreement has the right to terminate upon 30 days prior written notice.

No decisions have made at the present time regarding which committees of the Board the four directors appointed on February 23, 2017 will serve on.

Mr. Wei has also been appointed as the Chief Financial Officer of the Company, effective as of February 23, 2017. Mr. Wei, 45, is a finance professional with more than 15 years of experience working in public and private corporations in the United States. As the Chief Financial Officer of SeD Development Management LLC, Mr. Wei is responsible for oversight of all finance, accounting, reporting, and taxation activities for that company. Prior to joining SeD Development Management LLC in 2016, Mr. Wei worked for several different US multinational and private companies including serving as Controller at American Silk Mill, LLC from 2014-2016, serving as a Senior Financial Analyst at Air Products & Chemicals, Inc. from 2013-2014 and serving as a Financial/Accounting Analyst at First Quality Enterprise, Inc. from 2011-2012. Before Mr. Wei came to the United States, he worked as an equity analyst in Hong Yuan Securities, in Beijing, China, concentrating on industrial and public company research and analysis. Mr. Wei is a Certified Public Accountant and received his MBA from the University of Maryland and a Master of Business Taxation from the University of Minnesota. Mr. Wei also holds a Master in Business degree from Tsinghua University and a Bachelor degree from Beihang University. Mr. Wei also serves as the Chief Financial Officer of HomeownUSA.

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

On March 9, 2017, the Company filed a Certificate of Designation of the Company’s Series F Preferred Stock which provides the holder of the Company’s Series F Preferred Stock with the right to vote with the holders of common stock on all matters submitted to the shareholders. Such Series F holder shall be entitled to 100,000 votes per share of Series F Preferred Stock (with 250,000 shares of Series F Preferred Stock presently issued and outstanding, this entitles the holder thereof to a total number of votes equal to 25,000,000,000 shares of the Company’s common stock). The Series F Preferred Stock shall not be subject to any stock split (including but not limited to any reverse stock split) or stock dividend. The Series F Preferred Stock is not convertible into common stock. As long as any shares of Series F Preferred Stock are outstanding, no additional shares of any series of preferred stock, including but not limited to the Series F Preferred Stock, may be issued by the Corporation or any Subsidiary thereof without the prior written consent of all of the holders of Series F Preferred Stock. In addition, unless the holders of at least 67% in stated value of the then outstanding shares of Series F Preferred Stock shall have otherwise given prior written consent, the Company shall not, and shall not permit any of its subsidiaries to, directly or indirectly: (a) amend its charter documents, including, without limitation, its certificate of incorporation and bylaws, in any manner that materially and adversely affects any rights of the holders of Series F Preferred Stock; (b) repay, repurchase or offer to repay, repurchase or otherwise acquire more than a de minimis number of shares of its preferred stock and common stock; (c) pay cash dividends or distributions on certain securities of the Company, including common stock; or (d) enter into any agreement with respect to any of the foregoing.

On March 27, 2017, the Company filed Certificates of Amendment to each of the Certificate of Designations for the Company's Series E and Series H Convertible Preferred Stock. The Each Certificates of Amendment provides, among other things, that (i) each holder shall be entitled to vote on all matters submitted to shareholders of the Company and shall be entitled to such number of votes that is equal to the number of shares of common stock that each share of Series H or Series E Convertible Preferred Stock, as the case may be, is convertible into; provided, however, that in connection with a vote by the shareholders of the Company on a proposal for a reverse stock split of the issued and outstanding common stock of the Company, each holder of Series H or Series E Convertible Preferred Stock, as the case may be, agrees that the Company's Board of Directors can vote on his or her behalf, (ii) each share of Series H or Series E Convertible Preferred Stock, as the case may be, shall be convertible, at any time after the listing of the Company's common stock on a national securities exchange and the passage of minimum time of any regulatory period for the shares being free to trade at the option of the holder, into that number of shares of common stock determined by dividing 25% of the stated value of each share of preferred stock by the conversion price which is 100% of the average price per share of the Company's Common Stock for the immediately preceding twelve (12) trading days; subject to an increase cap of 250% of the minimum price required for an up-listing to a national securities exchange and (iii) the common stock issuable upon conversion of the Series E and Series H Convertible Preferred Stock, as the case may be, shall be subject to certain trade restrictions as set forth in the Certificates of Amendment for each of the Series E and Series H Convertible Preferred Stock, as the case may be.

Each of the Certificates of Amendment to the Certificate of Designations for each of the Series E and Series H Convertible Preferred Stock state the following: In the event that 2 of the 3 milestones set forth below are not achieved on or before June 25, 2017, this Certificate of Amendment shall be null and void and of no further effect.

- a) The Company raises at least \$1.5 million in financing;
- b) Avant Diagnostics, Inc. raises at least \$1.5 million in financing; or
- c) Cutanogen Corporation raises at least \$2.5 million in financing.

The foregoing summary of the terms of the Company's Series F Preferred Stock and the Certificates of Amendment to each of the Certificate of Designations for the Series E and Series H Convertible Preferred Stock are subject to, and qualified in its entirety by, such documents, each of which is filed as an exhibit hereto.

#### **Item 8.01 Other Events.**

As of August 1, 2016, Mr. Gerald Commissiong, voluntarily reduced his compensation from the Company to \$0.

On or about September 16, 2016, Memory DX, LLC ("MDX") filed a lawsuit against the Company, Amaranthus Bioscience, Inc., Amaranthus Diagnostics, Inc., Avant Diagnostics, Inc., Avant Diagnostics Acquisition Corporation, et al (collectively the "Defendants") in the Superior Court of the State of Arizona, County of Maricopa (Case Number CV2016-015026). On or about November 4, 2016, MDX filed an Application for Entry of Default with the Superior Court of the State of Arizona, County of Maricopa. On or about December 14, 2016, a default judgment (the "Default Judgment") was rendered in Case Number CV2016-015026 and was entered in Superior Court of the State of Arizona, County of Maricopa against the Defendants. On or about February 15, 2017, MDX and the Defendants entered into a settlement agreement. Pursuant to the settlement agreement, in consideration for fully satisfying the Default Judgment, the Company agreed to pay MDX \$25,000 via wire transfer upon closing of the next equity financing of the Company and \$75,000 via wire transfer upon the closing of a proposed merger between Avant and another corporation and issue to MDX 5,000,000 shares of restricted common stock (the "Shares") of Avant (the "Settlement Sum"). Avant is no longer planning to enter into the proposed merger referenced above. In addition to federal securities restrictions, the Shares are subject to existing restrictions to sale, beginning on May 11, 2016 and ending on the earlier of (i) eighteen (18) months after such date or (ii) a Change in Control in Avant. Upon payment by the Company of the Settlement Sum, MDX shall assign the License Agreement between MDX and University of Leipzig dated May 22, 2013, as amended, to the Company, as well as assign the Asset Purchase Agreement between MDX and the Company to the Company. In addition, Avant shall pay MDX an additional \$100,000 upon Avant entering into a direct license agreement with the University of Leipzig with respect to intellectual property surrounding the LymPro test. If Avant is unable to negotiate and sign a direct license agreement with the University of Leipzig by September 30, 2017, it will pay the additional \$100,000 to MDX on that date or, alternatively, it can extend the deadline to December 30, 2017 and will pay MDX a total of \$150,000 on or before that date or the date of its direct license agreement with the University of Leipzig, whichever occurs first. On March 7, 2017, the Company paid \$12,500 towards the \$25,000 it owes to MDX pursuant to the Settlement Agreement.

On January 16, 2017, the Company entered into a termination agreement with the U.S. Army Institute of Surgical Research (“USISR”) terminating the Cooperative Research and Development Agreement dated as of July 15, 2015 between the Company and USISR with respect to research and development on the Company’s ESS asset. The Company is evaluating its strategic options for the continuation of the ESS program, including focusing exclusively on development of ESS in the pediatric burn market where there is significant existing human clinical data supporting the clinical utility of ESS in the treatment of catastrophic pediatric severe burns. The Company is currently evaluating its options for product manufacture to support the pivotal clinical studies in the area of pediatric burns.

On February 23, 2017, a non-binding Letter of Intent was released from escrow between SeD Biomedical and the Company wherein SeD Biomedical agreed to inject certain assets into the Company, subject to certain contingencies, including, but not limited to, the completion of due diligence and the execution of definitive agreements. SeD Biomedical is entitled to select certain members of the Board pursuant to its agreement with the Company.

On February 27, 2017, the Company issued a press release announcing the execution of a non-binding Letter of Intent between the Company and SeD Biomedical for the injection of certain SeD Biomedical assets into the Company. A copy of the press release is attached hereto as Exhibit 99.1.

On March 15, 2017, a complaint was filed against the Company in Superior Court of California, County of San Francisco by GreenTree Financial Group, Inc. and BCM Lending, LLC alleging breach of contract and other causes of action with respect to certain notes and preferred stock of the Company and seeking monetary damages as well as specific performance and injunctive relief. The Company intends to defend itself vigorously and is evaluating its legal options with respect to the defendants and their affiliates.

**Item 9.01 Financial Statements and Exhibits.**

*(d) Exhibits*

<b>Exhibit No.</b>	<b>Description</b>
3.1	Certificate of Designation of Series F Preferred Stock filed with the Nevada Secretary of State on March 9, 2017.
3.2	Certificate of Amendment of the Certificate of Designations for the Series E Convertible Preferred Stock filed with the Nevada Secretary of State on March 27, 2017.
3.3	Certificate of Amendment of the Certificate of Designations for the Series H Convertible Preferred Stock filed with the Nevada Secretary of State on March 27, 2017.
10.1	Form of Contingent Settlement Agreements for Senior Secured Convertible Debenture Holders.
10.2	Form of Contingent Settlement Agreements for Convertible Series E Preferred Stock Holders.
10.3	Form of Contingent Settlement Agreements for Convertible Series H Preferred Stock Holders.
10.4	Securities Purchase Agreement, entered into on March 6, 2017, by and among Amaranthus BioScience Holdings, Inc. and Amaranthus Bioscience PTE, Ltd.
99.1	Press Release dated February 27, 2017.

**SIGNATURES**

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

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

Date: March 28, 2017

By: /s/ Gerald E. Commissiong  
Name: Gerald E. Commissiong  
Title: Chief Executive Officer

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**  
**CERTIFICATE OF DESIGNATION OF PREFERENCES,**  
**RIGHTS AND LIMITATIONS**  
**OF**  
**SERIES F 8% CONVERTIBLE PREFERRED STOCK**

(PURSUANT TO NRS 78.1955)

The undersigned, Gerald E. Commissiong and Marc E. Faerber, do hereby certify that:

1. They are the President and Secretary, respectively, of Amarantus BioScience Holdings, Inc., a Nevada corporation (the "Corporation").

2. The Corporation is authorized to issue 10,000,000 shares of preferred stock, of which 250,000 shares of Series A Convertible Preferred Stock, 3,000,000 shares of Series B Convertible Preferred Stock, 750,000 shares of Series C Convertible Preferred Stock, 13,335 shares of Series E Convertible Preferred Stock, 10,000 shares of Series G Preferred Stock and 25,000 shares of Series H Convertible Preferred Stock have been designated.

3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the certificate of incorporation of the Corporation, as amended, provides for a class of its authorized stock known as preferred stock, consisting of 10,000,000 shares, \$0.001 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix the dividend rights, dividend rate, voting rights, conversion rights, rights and terms of redemption and liquidation preferences of any wholly unissued series of preferred stock and the number of shares constituting any series and the designation thereof, of any of them; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of, except as otherwise set forth in the Purchase Agreement, up to 250,000 shares of the preferred stock which the Corporation has the authority to issue, as follows:

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

## TERMS OF PREFERRED STOCK

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

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

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

“Bankruptcy Event” means any of the following events: (a) the Corporation or any Significant Subsidiary (as such term is defined in Rule 1-02(w) of Regulation S-X) thereof commences a case or other proceeding under any bankruptcy, reorganization, arrangement, adjustment of debt, relief of debtors, dissolution, insolvency or liquidation or similar law of any jurisdiction relating to the Corporation or any Significant Subsidiary thereof, (b) there is commenced against the Corporation or any Significant Subsidiary thereof any such case or proceeding that is not dismissed within 60 days after commencement, (c) the Corporation or any Significant Subsidiary thereof is adjudicated insolvent or bankrupt or any order of relief or other order approving any such case or proceeding is entered, (d) the Corporation or any Significant Subsidiary thereof suffers any appointment of any custodian or the like for it or any substantial part of its property that is not discharged or stayed within 60 calendar days after such appointment, (e) the Corporation or any Significant Subsidiary thereof makes a general assignment for the benefit of creditors, (f) the Corporation or any Significant Subsidiary thereof calls a meeting of its creditors with a view to arranging a composition, adjustment or restructuring of its debts, or (g) the Corporation or any Significant Subsidiary thereof, by any act or failure to act, expressly indicates its consent to, approval of or acquiescence in any of the foregoing or takes any corporate or other action for the purpose of effecting any of the foregoing.

“Base Conversion Price” shall have the meaning set forth in Section 7(b).

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

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

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

“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition after the date hereof by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 40% of the voting securities of the Corporation (other than by means of conversion of Preferred Stock), (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 60% of the aggregate voting power of the Corporation or the successor entity of such transaction, (c) the Corporation sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 60% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date), or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

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

“Common Stock” means the Corporation’s common stock, par value \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

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

“Conversion Amount” means the sum of the Stated Value at issue.

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

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

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

“Dilutive Issuance” shall have the meaning set forth in Section 7(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 7(b).

“Dividend Notice Period” shall have the meaning set forth in Section 3(a).

“Dividend Payment Date” shall have the meaning set forth in Section 3(a).

“Dividend Share Amount” shall have the meaning set forth in Section 3(a).

“Equity Conditions” means, during the period in question, (a) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any, (b) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Preferred Stock, (c) all of the Conversion Shares issuable pursuant to the Transaction Documents (and shares issuable in lieu of cash payments of dividends) may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and acceptable to the Transfer Agent and the affected Holders, (d) the Common Stock is trading on a Trading Market and all of the shares issuable pursuant to the Transaction Documents are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future), (e) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (f) there is no existing Triggering Event and no existing event which, with the passage of time or the giving of notice, would constitute a Triggering Event, (g) the issuance of the shares in question to the applicable Holder would not violate the limitations set forth in Section 6(d) herein, (h) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated and (i) the applicable Holder is not in possession of any information provided by the Corporation that constitutes, or may constitute, material non-public information.

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

“Exempt Issuance” means the issuance of (a) shares of Common Stock or options to employees, officers or directors of the Corporation pursuant to the Company’s existing stock option plan or any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors of the Corporation or a majority of the members of a committee of non-employee directors established for such purpose; provided, however, such issuances to consultants under this clause (a) shall not exceed five (5%) percent of the issued and outstanding shares of the Corporation in any fiscal quarter, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock, issued and outstanding on the date of this Agreement (including issuances pursuant to the Company’s 8% Original Issue Discount Senior Secured Convertible Debentures issued concurrently or shortly after the Original Issue Date or any warrants issuable in connection therewith), or pursuant to other agreements of the Company existing prior to the date hereof and listed on Schedule 3.1(g) of the Purchase Agreement, provided that such securities and/or agreements have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities, and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Corporation, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Corporation and shall provide to the Corporation additional benefits in addition to the investment of funds, but shall not include a transaction in which the Corporation is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

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

“GAAP” means United States generally accepted accounting principles.

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

“Indebtedness” means (a) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Corporation’s balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business, and (c) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP.

“Junior Securities” means the Common Stock and all other Common Stock Equivalents of the Corporation other than those securities which are explicitly senior or pari passu to the Preferred Stock in dividend rights or liquidation preference.

“Liens” means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

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

“New York Courts” shall have the meaning set forth in Section 11(d).

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

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

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

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

“Purchase Agreement” means the Securities Purchase Agreement, dated on or about the Original Issue Date, among the Corporation and the original Holders, as amended, modified or supplemented from time to time in accordance with its terms.

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

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

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

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

“Stated Value” shall have the meaning set forth in Section 2, as the same may be increased pursuant to Section 3.

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

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

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

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

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

“Transaction Documents” means this Certificate of Designation, the Purchase Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Purchase Agreement.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Corporation with a mailing address of 77 Spruce Street, Suite 201, Cedarhurst, New York 11516 and a facsimile number of (646) 536-3179, and any successor transfer agent of the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as its Series F 8% Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be up to 250,000 (which shall not be subject to increase without the written consent of all of the holders of the Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Preferred Stock shall have a par value of \$0.001 per share and a stated value equal to \$0.10, subject to increase set forth in Section 3 below (the “Stated Value”).

### Section 3. Dividends.

a ) Dividends in Cash or in Kind. Holders shall be entitled to receive, and the Corporation shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) of 8% per annum (subject to increase pursuant to Section 10(b)), payable quarterly on January 1, April 1, July 1 and October 1, beginning on the first such date after the Original Issue Date and on each Conversion Date (with respect only to Preferred Stock being converted) (each such date, a "Dividend Payment Date") (if any Dividend Payment Date is not a Trading Day, the applicable payment shall be due on the next succeeding Trading Day) in cash, or at the Corporation's option, in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock as set forth in this Section 3(a), or a combination thereof (the dollar amount to be paid in shares of Common Stock, the "Dividend Share Amount"). The form of dividend payments to each Holder shall be determined in the following order of priority: (i) if funds are legally available for the payment of dividends and the Equity Conditions have not been met during the 20 consecutive Trading Days immediately prior to the applicable Dividend Payment Date (the "Dividend Notice Period"), in cash only, (ii) if funds are legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, at the sole election of the Corporation, in cash or shares of Common Stock which shall be valued at the Dividend Conversion Rate, (iii) if funds are not legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, in shares of Common Stock which shall be valued at the Dividend Conversion Rate, and (iv) if funds are not legally available for the payment of dividends and the Equity Conditions have not been met during the Dividend Notice Period, then, at the election of such Holder, such dividends shall accrue to the next Dividend Payment Date or shall be accreted to, and increase, the outstanding Stated Value. In addition, as a condition to paying dividends in shares of Common Stock, as to such Dividend Payment Date, prior to such Dividend Notice Period (but not more than five (5) Trading Days prior to the commencement of such Dividend Notice Period), the Corporation shall have delivered to each Holder's account with The Depository Trust Company a number of shares of Common Stock to be applied against such Dividend Share Amount equal to the quotient of (x) the applicable Dividend Share Amount divided by (y) the Dividend Conversion Rate, assuming for such purposes that the Dividend Payment Date is the Trading Day immediately prior to the commencement of the Dividend Notice Period (the "Dividend Conversion Shares"). The Holders shall have the same rights and remedies with respect to the delivery of any such shares as if such shares were being issued pursuant to Section 6 herein.

b ) Corporation's Ability to Pay Dividends in Cash or Kind. The Corporation shall promptly notify the Holders at any time the Corporation shall become able or unable, as the case may be, to legally pay cash dividends. If at any time the Corporation has the right to pay dividends in cash or shares of Common Stock, the Corporation must provide the Holders with at least 20 Trading Days' notice of its election to pay a regularly scheduled dividend in shares of Common Stock (the Corporation may indicate in such notice that the election contained in such notice shall continue for later periods until revised by a subsequent notice). The aggregate number of shares of Common Stock otherwise issuable to a Holder on a Dividend Payment Date shall be reduced by the number of shares of Common Stock previously issued to such Holder in connection with such Dividend Payment Date. If any Dividend Conversion Shares are issued to a Holder in connection with a Dividend Payment Date and are not applied against a Dividend Share Amount, then such Holder shall promptly return such excess shares to the Corporation.

c ) Dividend Calculations. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar day periods, and shall accrue daily commencing on the Original Issue Date, and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. Payment of dividends in shares of Common Stock shall otherwise occur pursuant to Section 6(c)(i) herein and, solely for purposes of the payment of dividends in shares, the Dividend Payment Date shall be deemed the Conversion Date. Dividends shall cease to accrue with respect to any Preferred Stock converted, provided that, the Corporation actually delivers the Conversion Shares within the time period required by Section 6(c)(i) herein. Except as otherwise provided herein, if at any time the Corporation pays dividends partially in cash and partially in shares, then such payment shall be distributed ratably among the Holders based upon the number of shares of Preferred Stock held by each Holder on such Dividend Payment Date.

d ) Late Fees. Any dividends, whether paid in cash or shares of Common Stock, that are not paid within three Trading Days following a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 18% per annum or the lesser rate permitted by applicable law which shall accrue daily from the Dividend Payment Date through and including the date of actual payment in full.

e ) Other Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall redeem, purchase or otherwise acquire directly or indirectly any Junior Securities except as expressly permitted by Section 10(a)(v). So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall directly or indirectly pay or declare any dividend or make any distribution upon (other than a dividend or distribution described in Section 6 or dividends due and paid in the ordinary course on preferred stock of the Corporation at such times when the Corporation is in compliance with its payment and other obligations hereunder), nor shall any distribution be made in respect of, any Junior Securities as long as any dividends due on the Preferred Stock remain unpaid, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities or shares pari passu with the Preferred Stock.

Section 4. Voting Rights. Except as otherwise expressly required by law, each holder of Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Corporation and shall be entitled to such number of votes that is equal to the number of shares of Common Stock that each share of Preferred Stock is convertible into multiplied by ten thousand (10,000), pursuant to Section 6, herein. Except as otherwise required by law or herein, the holders of shares of Preferred Stock shall vote together with the holders of Common Stock on all matters and shall not vote as a separate class.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation an amount equal to the Stated Value, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under this Certificate of Designation, for each share of Preferred Stock before any distribution or payment shall be made to the holders of any Junior Securities, and if the assets of the Corporation shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders shall be ratably distributed among the Holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. A Fundamental Transaction or Change of Control Transaction shall not be deemed a Liquidation. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

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

b ) Conversion Price. The conversion price for the Preferred Stock shall equal \$0.03 subject to adjustment herein, including but not limited to Section 7(b) (the "Conversion Price").

c) Mechanics of Conversion

i. Delivery of Certificate Upon Conversion. Not later than three (3) Trading Days after each Conversion Date (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) a certificate or certificates representing the Conversion Shares which, on or after the six month anniversary of the Original Issue Date, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Purchase Agreement) representing the number of Conversion Shares being acquired upon the conversion of the Preferred Stock (including, if the Corporation has given continuous notice pursuant to Section 3(b) for payment of dividends in shares of Common Stock at least 20 Trading Days prior to the date on which the Notice of Conversion is delivered to the Corporation, shares of Common Stock representing the payment of accrued dividends otherwise determined pursuant to Section 3(a) but assuming that the Dividend Notice Period is the 20 Trading Days period immediately prior to the date on which the Notice of Conversion is delivered to the Corporation and excluding for such issuance the condition that the Corporation deliver the Dividend Share Amount as to such dividend payment prior to the commencement of the Dividend Notice Period), and (B) a bank check in the amount of accrued and unpaid dividends (if the Corporation has elected or is required to pay accrued dividends in cash). On or after the six month anniversary of the Original Issue Date, the Corporation shall use its best efforts to deliver any certificate or certificates required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company or another established clearing corporation performing similar functions.

ii. Failure to Deliver Certificates. If, in the case of any Notice of Conversion, such certificate or certificates are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such certificate or certificates, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Common Stock certificates issued to such Holder pursuant to the rescinded Conversion Notice.

iii. Obligation Absolute: Partial Liquidated Damages. The Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or any one associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such certificate or certificates pursuant to Section 6(c)(i) on the second Trading Day after the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day and increasing to \$200 per Trading Day on the sixth Trading Day after such damages begin to accrue) for each Trading Day after such second Trading Day after the Share Delivery Date until such certificates are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages or declare a Triggering Event pursuant to Section 10 hereof for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

i v. Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable certificate or certificates by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver certificates representing shares of Common Stock upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

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

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

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

d ) Beneficial Ownership Limitation. The Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by such Holder or any of its Affiliates. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Corporation shall within two Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon not less than 61 days' prior notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase or decrease will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. If, at any time while this Preferred Stock is outstanding, the Corporation or any Subsidiary, as applicable sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Conversion Price (such lower price, the “Base Conversion Price” and such issuances, collectively, a “Dilutive Issuance”) (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 7(b) in respect of an Exempt Issuance. If the Corporation enters into a Variable Rate Transaction, despite the prohibition set forth in the Purchase Agreement, the Corporation shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible conversion price at which such securities may be converted or exercised. The Corporation shall notify the Holders in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 7(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the “Dilutive Issuance Notice”). For purposes of clarification, whether or not the Corporation provides a Dilutive Issuance Notice pursuant to this Section 7(b), upon the occurrence of any Dilutive Issuance, the Holders are entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether a Holder accurately refers to the Base Conversion Price in the Notice of Conversion.

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

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

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

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

g) Notice to the Holders.

i . Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

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

Section 8. [RESERVED]

Section 9. Negative Covenants. As long as any shares of Preferred Stock are outstanding, unless the holders of at least 67% in Stated Value of the then outstanding shares of Preferred Stock shall have otherwise given prior written consent, the Corporation shall not, and shall not permit any of the Subsidiaries to, directly or indirectly:

- a) amend its charter documents, including, without limitation, its certificate of incorporation and bylaws, in any manner that materially and adversely affects any rights of the Holder;
- b) repay, repurchase or offer to repay, repurchase or otherwise acquire more than a de minimis number of shares of its Common Stock, Common Stock Equivalents or Junior Securities, other than as to the Conversion Shares as permitted or required under the Transaction Documents;
- c) pay cash dividends or distributions on Junior Securities of the Corporation;
- d) enter into any transaction with any Affiliate of the Corporation which would be required to be disclosed in any public filing with the Commission, unless such transaction is made on an arm's-length basis and expressly approved by a majority of the disinterested directors of the Corporation (even if less than a quorum otherwise required for board approval); or
- e) enter into any agreement with respect to any of the foregoing.

Section 10. Miscellaneous.

a ) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at the address set forth above Attention: Gerald Commissiong, facsimile number (408) 852-4427, or such other facsimile number or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 11. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of such Holder appearing on the books of the Corporation, or if no such facsimile number or address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

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

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

d ) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Nevada, without regard to the principles of conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), 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 such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party 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 via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Certificate of Designation 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 other manner permitted by applicable law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designation or the transactions contemplated hereby. If any party shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

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

f) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

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

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

i ) Status of Converted or Redeemed Preferred Stock. Shares of Preferred Stock may only be issued pursuant to the Purchase Agreement. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series F 8% Convertible Preferred Stock.

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

IN WITNESS WHEREOF, the undersigned have executed this Certificate this \_\_\_<sup>th</sup> day of February 2017.

*/s/ Gerald E. Commissiong*

*/s/ Marc E. Faerber*

Name: Gerald E. Commissiong

Name: Marc E. Faerber

Title: President and Chief Executive Officer

Title: Chief Financial Officer and Secretary

ANNEX A

NOTICE OF CONVERSION

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

The undersigned hereby elects to convert the number of shares of Series F 8% Convertible Preferred Stock indicated below into shares of common stock, par value \$0.001 per share (the "Common Stock"), of Amaranthus BioScience Holdings, Inc., a Nevada corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Purchase Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: \_\_\_\_\_

Number of shares of Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Preferred Stock to be Converted: \_\_\_\_\_

Stated Value of shares of Preferred Stock to be Converted: \_\_\_\_\_

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

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

Number of shares of Preferred Stock subsequent to Conversion: \_\_\_\_\_

Address for Delivery: \_\_\_\_\_

or

DWAC Instructions:

Broker no: \_\_\_\_\_

Account no: \_\_\_\_\_

[HOLDER]

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

**CERTIFICATE OF AMENDMENT OF  
CERTIFICATE OF DESIGNATION OF  
AMARANTUS BIOSCIENCE HOLDINGS, INC.  
Pursuant to Section 78.1955 of the  
Nevada Revised Statutes**

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**SERIES E CONVERTIBLE PREFERRED STOCK**

On behalf of Amarantus BioScience Holdings, Inc., a Nevada corporation (the "Corporation"), the undersigned hereby certifies that the following resolution has been duly adopted by the board of directors of the Corporation (the "Board");

RESOLVED, that, pursuant to the authority granted to and vested in the Board by the provisions of the articles of incorporation of the Corporation (the "Articles of Incorporation");

1. Section 1 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred Stock is hereby amended by adding the following definitions:

"First Liquidation Interval" means that date when the Holder will be able to liquidate a maximum of the Tranche Size amount beginning at the next trading day after the date that is the earlier of i) nine (9) months from the Tender Exchange Closing Date and ii) the first close of trading when that closing price for the Corporation's Common Stock is greater than the Qualifying Price

"Qualifying Price" means one hundred and fifty percent (150%) of the Stock Exchange Uplist Price.

"Stock Exchange Uplisting" means a listing of the Common Stock of the Corporation on a U.S. national securities exchange.

"Stock Exchange Uplist Price" means the minimum price per share that is required for the Stock Exchange Uplisting.

"Subsequent Liquidation Interval" means each of the next three successive four (4) month intervals after the First Liquidation Interval.

"Tender Exchange" means that secured debt and preferred equity exchange memorialized by the letter of intent dated [month, day, year] between the Corporation and holders of the secured debt and preferred equity ("Letter of Intent").

"Tender Exchange Closing Date" means that closing date as defined in the Letter of Intent.

"Tranche Size" means 25% of the Stated Value of such share of Preferred Stock for each of the First Liquidation and Subsequent Liquidation Intervals.

2. Section 4 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred stock is hereby deleted in its entirety and in lieu thereof the following Section 4 is hereby inserted:

“Voting Rights. Except as otherwise expressly required by law, each holder of Series E Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Corporation and shall be entitled to such number of votes that is equal to the number of shares of Common Stock that each share of Series E Preferred Stock is convertible into, pursuant to Section 6, herein; provided, however, that in connection with a vote by the shareholders of the Corporation on a proposal for a reverse stock split of the issued and outstanding Common Stock of the Corporation, each holder of Series E Preferred Stock agrees that the Corporation’s Board of Directors can vote on his or her behalf. Except as otherwise required by law or herein, the holders of shares of Series E Preferred Stock shall vote together with the holders of Common Stock on all matters and shall not vote as a separate class.”

3. Section 6(a) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereof the following Section 6(a) is hereby inserted:

“a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time after the Stock Exchange Uplisting and the passage of minimum time of any regulatory period for the shares being free to trade (“Free Trading Date”) at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Tranche Size by the Conversion Price that is applicable to the First Liquidation Interval or the Subsequent Liquidation Interval. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a “Notice of Conversion”). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile such Notice of Conversion to the Corporation (such date, the “Conversion Date”). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.”

4. Section 6(b) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereof the following Section 6(b) is hereby inserted:

“Section 6(b) Conversion Price. The conversion price for the Preferred Stock shall equal 100% of the average price per share of the Corporation’s Common Stock for the immediately preceding twelve (12) Trading Days (the “Determination Period”); subject to an increase cap of 250% of the Stock Exchange Uplist Price (the “Conversion Price”).”

5. Section 6(e) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred Stock is hereby deleted in its entirety.
6. Section 10 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series E Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereto the following Section 10 is hereby inserted:

“Section 10. Trading Restrictions.

a) During the Determination Period, there will be no trading or liquidation of shares.

b) The daily liquidation of any Common Stock issued pursuant to Section 6(b) shall be limited to no more than 5% of the average trading volume of the prior five (5) trading days subject to a minimum of 0.3125% per Trading Day multiplied by the related First Liquidation Interval Tranche Size or Subsequent Liquidation Interval Tranche Size, as the case may be ( the “Liquidation Limit”). Shares that may have been converted in the prior First Liquidation Interval and/or Subsequent Liquidation Intervals and not yet liquidated, can be rolled to the next Subsequent Liquidation Interval(s) however such unliquidated shares in aggregate with the shares of the subject Subsequent Liquidation Interval are subject to the Liquidation Limit of that Subsequent Liquidation Interval.

c) For any sale proposed (the “Sale Proposal”) by a Holder which is in excess of the Liquidation Limit, the Corporation will have a right of first refusal to purchase the number of shares in excess of the Liquidation Limit at a price equal to the average price per share of the prior five (5) Trading Days. Within three (3) Business Days after receipt of the Sale Proposal by the Corporation, the Corporation shall inform the Holder if it is exercising its right of first refusal pursuant to this Section 10(b) and if it declines to exercise such right, the Holder may sell the number of shares in excess of the Liquidation Limit, subject to the Corporation’s approval of the buyer of such shares.”

d) In the event that the Corporation does not complete the Stock Uplisting including compliance with reporting requirements within nine (9) months from the date of the Letter of Intent, then the liquidation terms for Corporation’s Common Stock per this Section 10. Trading Restrictions memorialized herein will not be applicable, and the shares of Common Stock that are the subject of this Certificate of Designation shall be free to trade.

7. In the event that any 2 of the milestones set forth below are not achieved by June 25, 2017, this Certificate of Amendment shall be null and void and of no further effect.
  - a) The Corporation raises at least \$1.5 million in financing;
  - b) Avant Diagnostics, Inc. raises at least \$1.5 million in financing; or
  - c) Cutanogen Corporation raises at least \$2.5 million in financing.

IN WITNESS WHEREOF, the undersigned have duly signed this Certificate of Amendment to the Certificate of Designation of the Series E Convertible Preferred Stock as of this 27th day of March 2017.

Amarantus BioScience Holdings, Inc.

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By: Gerald Commissiong

Title: President and Chief Executive Officer

**CERTIFICATE OF AMENDMENT OF  
CERTIFICATE OF DESIGNATION OF  
AMARANTUS BIOSCIENCE HOLDINGS, INC.  
Pursuant to Section 78.1955 of the  
Nevada Revised Statutes**

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**SERIES H CONVERTIBLE PREFERRED STOCK**

On behalf of Amaranthus BioScience Holdings, Inc., a Nevada corporation (the “Corporation”), the undersigned hereby certifies that the following resolution has been duly adopted by the board of directors of the Corporation (the “Board”):

RESOLVED, that, pursuant to the authority granted to and vested in the Board by the provisions of the articles of incorporation of the Corporation (the “Articles of Incorporation”):

1. Section 1 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred Stock is hereby amended by adding the following definitions:

“First Liquidation Interval” means that date when the Holder will be able to liquidate a maximum of the Tranche Size amount beginning at the next trading day after the date that is the earlier of i) nine (9) months from the Tender Exchange Closing Date and ii) the first close of trading when that closing price for the Corporation’s Common Stock is greater than the Qualifying Price

“Qualifying Price” means one hundred and fifty percent (150%) of the Stock Exchange Uplist Price.

“Stock Exchange Uplisting” means a listing of the Common Stock of the Corporation on a U.S. national securities exchange.

“Stock Exchange Uplist Price” means the minimum price per share that is required for the Stock Exchange Uplisting.

“Subsequent Liquidation Interval” means each of the next three successive four (4) month intervals after the First Liquidation Interval.

“Tender Exchange” means that secured debt and preferred equity exchange memorialized by the letter of intent dated [month, day, year] between the Corporation and holders of the secured debt and preferred equity (“Letter of Intent”).

“Tender Exchange Closing Date” means that closing date as defined in the Letter of Intent.

“Tranche Size” means 25% of the Stated Value of such share of Preferred Stock for each of the First Liquidation and Subsequent Liquidation Intervals.

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2. Section 4 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred stock is hereby deleted in its entirety and in lieu thereof the following Section 4 is hereby inserted:

“Voting Rights. Except as otherwise expressly required by law, each holder of Series H Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Corporation and shall be entitled to such number of votes that is equal to the number of shares of Common Stock that each share of Series H Preferred Stock is convertible into, pursuant to Section 6, herein; provided, however, that in connection with a vote by the shareholders of the Corporation on a proposal for a reverse stock split of the issued and outstanding Common Stock of the Corporation, each holder of Series H Preferred Stock agrees that the Corporation’s Board of Directors can vote on his or her behalf. Except as otherwise required by law or herein, the holders of shares of Series H Preferred Stock shall vote together with the holders of Common Stock on all matters and shall not vote as a separate class.”

3. Section 6(a) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereof the following Section 6(a) is hereby inserted:

“a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time after the Stock Exchange Uplisting and the passage of minimum time of any regulatory period for the shares being free to trade (“Free Trading Date”) at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Tranche Size by the Conversion Price that is applicable to the First Liquidation Interval or the Subsequent Liquidation Interval. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a “Notice of Conversion”). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile such Notice of Conversion to the Corporation (such date, the “Conversion Date”). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.”

4. Section 6(b) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereof the following Section 6(b) is hereby inserted:

“Section 6(b) Conversion Price. The conversion price for the Preferred Stock shall equal 100% of the average price per share of the Corporation’s Common Stock for the immediately preceding twelve (12) Trading Days (the “Determination Period”); subject to an increase cap of 250% of the Stock Exchange Uplist Price (the “Conversion Price”).”

5. Section 6(e) of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred Stock is hereby deleted in its entirety.
6. Section 10 of the Second Amended and Restated Certificate of Designation of the Corporation for the Series H Convertible Preferred Stock is hereby deleted in its entirety and in lieu thereto the following Section 10 is hereby inserted:

“Section 10. Trading Restrictions.

a) During the Determination Period, there will be no trading or liquidation of shares.

b) The daily liquidation of any Common Stock issued pursuant to Section 6(b) shall be limited to no more than 5% of the average trading volume of the prior five (5) trading days subject to a minimum of 0.3125% per Trading Day multiplied by the related First Liquidation Interval Tranche Size or Subsequent Liquidation Interval Tranche Size, as the case may be ( the “Liquidation Limit”). Shares that may have been converted in the prior First Liquidation Interval and/or Subsequent Liquidation Intervals and not yet liquidated, can be rolled to the next Subsequent Liquidation Interval(s) however such unliquidated shares in aggregate with the shares of the subject Subsequent Liquidation Interval are subject to the Liquidation Limit of that Subsequent Liquidation Interval.

c) For any sale proposed (the “Sale Proposal”) by a Holder which is in excess of the Liquidation Limit, the Corporation will have a right of first refusal to purchase the number of shares in excess of the Liquidation Limit at a price equal to the average price per share of the prior five (5) Trading Days. Within three (3) Business Days after receipt of the Sale Proposal by the Corporation, the Corporation shall inform the Holder if it is exercising its right of first refusal pursuant to this Section 10(b) and if it declines to exercise such right, the Holder may sell the number of shares in excess of the Liquidation Limit, subject to the Corporation’s approval of the buyer of such shares.”

d) In the event that the Corporation does not complete the Stock Uplisting including compliance with reporting requirements within nine (9) months from the date of the Letter of Intent, then the liquidation terms for Corporation’s Common Stock per this Section 10. Trading Restrictions memorialized herein will not be applicable, and the shares of Common Stock that are the subject of this Certificate of Designation shall be free to trade.

7. In the event that any 2 of the milestones set forth below are not achieved by June 25, 2017, this Certificate of Amendment shall be null and void and of no further effect.
  - a) The Corporation raises at least \$1.5 million in financing;
  - b) Avant Diagnostics, Inc. raises at least \$1.5 million in financing; or
  - c) Cutanogen Corporation raises at least \$2.5 million in financing.

IN WITNESS WHEREOF, the undersigned have duly signed this Certificate of Amendment to the Certificate of Designation of the Series H Convertible Preferred Stock as of this 27th day of March 2017.

Amarantus BioScience Holdings, Inc.

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By: Gerald Commissiong  
Title: President and Chief Executive Officer

CONFIDENTIAL

January 3, 2017

Re: Letter of Intent for Tender Exchange of Existing Debt and Equity Securities  
 Prepared for: \_\_\_\_\_

Dear \_\_\_\_\_:

This letter agreement, including that certain Addendum of even date thereto include as attached on Exhibit B, sets forth our agreement and understanding as to the essential terms of the tender exchange of existing debt and equity securities of Amarantus BioScience Holdings, Inc. (the "Company") located at 315 Montgomery Street, Suite 900, San Francisco, CA 94104, including surrender of all warrants owned by \_\_\_\_\_ ("Holder") and a collateral release of assets of the Company, in return for receipt of newly issued equity securities in the Company ("Tender Exchange") as duly authorized and issued by the Company. The parties intend this letter agreement to be binding and enforceable, and that it will inure to the benefit of the parties and their respective successors and assigns.

1 . **Definitive Legal Agreements.** The purpose of this letter agreement constructed as a binding Letter of Intent (this "LOI") is to set forth certain specific financial terms of the Tender Exchange for the Holder, and the conditions precedent to be achieved by or before the Closing Date (defined below). Legal agreements, releases, the forms of the securities, and any other documents that may be required to attain the completion of the conditions precedent for the Tender Exchange ("Legal Agreements") shall contain customary conditions, representations, warranties, covenants, indemnities and other terms, including terms substantially as set forth in this LOI and in the Tender Exchange Term Sheet attached as Exhibit A hereto. Upon execution of this LOI, the parties hereto will continue in good faith to commit their resources to negotiate, prepare, and review the Legal Agreements required to execute the Tender Exchange as soon as practicable, but no later than the expiration of the Stand Still Period (as defined in Paragraph 3 below), as such may be extended pursuant to Paragraph 3. A majority of all such Holders will be required to agree and execute the Legal Agreements, and the Tender Exchange completed as soon as possible. The parties agree that the Legal Agreements shall incorporate the financial terms as provided herein, which terms shall not be subject to re-negotiation.

2 . **Termination.** AMBS retains the sole right to terminate this LOI, in the event that a) less than a majority of Holders of debt and equity securities respectively execute this form of LOI and subsequently the related Legal Agreements as may be required ("Lack of Majority"), and/or b) failure to attain completion of conditions precedent by or before the Closing Date. AMBS will advise the Holders by written notice at any time after the earliest of the following to occur (a "Termination Event"): (i) Lack of Majority; or (ii) absence of agreement on non-financial terms of the Legal Agreements and/or failure to attain completion of conditions precedent on a timely basis by the Closing Date.

Initials: \_\_\_\_\_ / \_\_\_\_\_

**Binding LOI for Tender Exchange**

Page 2 of 15

3 . **Stand Still Period.** Unless this LOI is terminated as provided in Paragraph 2 above, for a period from the date of execution of this LOI up to and including the Closing Date (the "Stand Still Period"), each Holder agrees not to, directly or indirectly, and shall cause its employees, shareholders and directors not to, directly or indirectly, solicit, encourage, contact, enable or negotiate with any other person regarding the pledge, hypothecation, lien, sale, license or other transfer of the assets, debt, and equity securities of AMBS that are the subject of the Tender Exchange. The parties may extend the Stand Still Period by mutual agreement on a change to the Closing Date if such mutual agreement is by or before the previously agreed Closing Date. During the Stand Still Period AMBS maintains the right to operate its business including as required any financings related thereto.

4 . **Closing Date:** The closing date shall be determined as 3 business days following the attainment of the conditions precedent as specified in Exhibit A ("Closing Date"); provided, however in the event of a Funding Date (defined in Exhibit A below), such closing date shall be no later than the Funding Closing Date (defined in Exhibit A below).

5. **Confidentiality; Restrictions on Use.** Each of AMBS and the Holder will use the Due Diligence Information (defined below) solely for the purpose of completing the Legal Agreements and unless and until the parties consummate the Tender Exchange, its affiliates, directors, officers, employees, advisors, and agents (the Purchaser's "Representatives") will keep the Due Diligence Information strictly confidential. Each of AMBS and the Holder will disclose the Due Diligence Information only to those its' respective Representatives who need to know such information for the purpose of consummating the Tender Exchange. Each of AMBS and the Holder agrees to be responsible for any breach of this paragraph 5 by any of its' respective Representatives. In the event the Tender Exchange is not consummated, each of AMBS and the Holder the Purchaser will certify in writing that all such materials or copies of such materials have been destroyed, except for the retention as may be required by law or securities exchange regulations. The Holder will not use any Due Diligence Information ("Restrictions") in the event that the Tender Exchange is not consummated. Neither party shall make any public announcement or public statement or respond to any press inquiry pertaining to this LOI or the Tender Exchange without the prior written approval of the other party, except for disclosures (a) as may be required by law or securities exchange regulations or (b) to Representatives and existing shareholders or funding parties, provided such disclosure is on a need-to-know basis and subject to non-use and non-disclosure provisions consistent with the confidentiality provisions herein. The provisions of this paragraph 5 will survive the termination of this LOI.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 3 of 15

6 . **Due Diligence.** In connection with the due diligence hereunder, during the Stand Still Period, the Holder and AMBS will cause its representatives to make available the necessary data, information and materials required to understand the rationale of the Tender Exchange and to complete the Legal Agreements (“Due Diligence Information”) to the other party or its Representatives as they may reasonably request, in all cases subject to the confidentiality obligations specified in clause 5.

7 . **Corporate Authority.** Each party acknowledges it has all requisite corporate power and authority to enter into this LOI and, to consummate the Tender Exchange as contemplated herein. By execution of this LOI including Exhibit A, each party affirms that this LOI is not subsequently subject to any board ratification or approval.

8. **Conditions to Obligation.** The Holder and AMBS will be obligated to consummate the Tender Exchange unless AMBS has failed to obtain completion of the conditions precedent, notwithstanding AMBS’ best efforts to attain agreement with the Holder on the Legal Agreements that are required in connection with the Tender Exchange.

9 . **Miscellaneous.** This LOI (together with Exhibit A hereto) and the Legal Agreements shall be governed by and construed in accordance with the laws of the State of New York, without regard to conflicts of laws principles. This LOI together with Exhibit A hereto is the entire agreement between the parties with respect to the subject matter herein and may be modified only by a subsequent written agreement signed by both parties. Each of AMBS and the Holder will be solely responsible for its own expenses, including legal fees, incurred in connection with the Tender Exchange, including the negotiation and execution of the Legal Agreements. By their signatures set forth below, the parties hereby agree to this LOI together with Exhibit A hereto as of the last date of the signatures set forth below.

*(Signatures on following page)*

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 4 of 15

If you are in agreement with the terms of this letter agreement, please initial each page with no other changes and sign in the space provided below and return that signed copy back to my attention by or before 12 noon EST on Thursday January 5, 2017. Upon receipt of a signed copy of this letter, we will proceed with our plans for consummating the Tender Exchange in a timely manner.

Very truly yours,

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

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

Gerald E. Commissiong

President & Chief Executive Officer

Agreed and Accepted by:

\_\_\_\_\_ :

By:

\_\_\_\_\_

Name:

\_\_\_\_\_

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

Date: \_\_\_\_\_

Initials: \_\_\_\_\_ / \_\_\_\_\_

\_\_\_\_\_

**Exhibit A**

To Binding Letter of Intent between

Amarantus BioScience Holdings Inc. (OTCMKTS: AMBS) and

Holder: \_\_\_\_\_

Amarantus BioScience Holdings Inc. (“AMBS” or the “Company”) hereby proposes the indicative terms and conditions of its restructuring (“Restructuring”) including terms for the tender exchange of existing a) convertible debt (“Debt Exchange”) and b) preferred equity (“Preferred Exchange”) (for each type of security, an “Exchange” and collectively, the “Tender Exchange”) as summarized for you (“Holder”) on the following page Table A for the Debt Exchange and Table B for the Preferred Exchange, with a summary overall as Table C. Eighty percent (80%) of the current principal of the convertible debt and seventy-five percent (75%) the preferred equity respectively will be used for the Debt Exchange and the Preferred Exchange, as further described below.

**Documentation:**

Terms herein, except for the financial terms of the Exchange summarized herein which are agreed, are subject to agreement and execution of final documentation by or before the Closing Date (defined below) of each security Exchange comprising the Tender Exchange that is required to occur simultaneously. AMBS will pay up to \$100,000 in aggregate (“Maximum Legal Costs”) for all of the Holder’s legal counsel representing parties to the Debt Exchange and the Preferred Exchange based on submitted invoices and all back-up to the Holder, and if the aggregate of invoices is in excess of the Maximum Legal Costs, then the Maximum Legal Costs will be allocated *pro rata* to each Holder based on their respective investment amount, which *pro rata* share may be combined for convenience for Holders using the same legal counsel; provided after such allocation, any legal costs in excess of each Holder’s allocation will be the responsibility of that Holder.

**Debt exchange:**

AMBS proposes to exchange the shares of Avant Diagnostics, Inc. (OTCMKST: AVDX) that it beneficially owns, for the convertible debt previously issued by AMBS, as follows:

- 1 ) “Debt Exchange Amount” shall be for the outstanding unpaid principal amount only of the convertible debt and for the surrender of all warrants issued therewith as of the Closing Date
- 2) “Debt Exchange Factor for Avant” shall be forty percent (40%)

Initials: \_\_\_\_\_ / \_\_\_\_\_

- 3) “Number of Shares” in AVDX shall be a) the product the Debt Exchange Amount times the Debt Exchange Factor for Avant, with such product divided by b) the lower of i) \$0.16 per share and ii) the share price of AVDX as of two (2) business days preceding the Closing Date as defined below (“AVDX Divisor”), with such AVDX Divisor being subject to a floor of \$0.12 per share (“AVDX Floor”), to estimate c) the number of shares, with final share amount issued to be rounded down (no fractional shares)
- 4) “Liquidation Terms for AVDX” to be memorialized on the legend of the AVDX securities as follows: the Debt Holder shall be allowed to sell that amount of the AVDX common stock equal to i) on a daily basis, up to five percent (5%) of the average trading volume subject to ii) a maximum of 0.50% (1/2%) of the outstanding shares of AVDX and a minimum of 0.4167% per trading day (derived from 25% divided by 60 trading days) times twenty-five percent (25%) of the Number of Shares (“AVDX Leak Out Percentage”) after the date that is the earlier of iii) the quarterly period end date (each such quarter, an “AVDX Liquidation Interval”) following nine (9) months after the Closing Date of this Tender Exchange defined below and for the next two (2) successive quarters thereafter (“AVDX Quarterly Liquidation Amount”) and iv) the first close of trading no earlier than six (6) months after the Closing Date of this Tender Exchange defined below when that closing price for AVDX is greater than one hundred and fifty percent (150%) of the AVDX Divisor (such AVDX price the “AVDX Qualifying Price”) (such first date, the “AVDX First Liquidation Date”); provided, however the such liquidation is on a non-cumulative basis so that if the Debt Holder did not sell any of its AVDX shares in the previous AVDX Liquidation Interval, the maximum amount of shares sold in any subsequent AVDX Liquidation Interval cannot be greater than the AVDX Quarterly Liquidation Amount for that quarter; and finally, there will be no liquidation restrictions after the third successive quarterly period following the AVDX First Liquidation Date.
- 5) AVDX completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the Closing Date defined below, otherwise the Liquidation Terms for AVDX will not apply and the Holders are free to trade the shares.

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Furthermore, AMBS also proposes to issue to Debt Exchange participants new convertible notes with respect to new shares in AMBS common stock ("New Notes (Debt)"), which shall be subject to Conversion Terms and Trading Restrictions described below, as follows:

- 6) "Debt Exchange Amount" shall be for the outstanding unpaid principal amount only of the convertible debt and for the surrender of all warrants issued therewith as of the Closing Date
- 7) "Debt Exchange Factor for New Notes" shall be forty percent (40 %)
- 8) "New Notes Principal Amount (Debt)" of the New Notes (Debt) shall be a) the product of the Debt Exchange Amount times the Debt Exchange Factor for New Notes (Debt), to estimate b) the principal amount of the New Notes (Debt)
- 9) The New Notes (Debt) will be non-interest bearing and will have an initial maturity date of nine months from the Tender Exchange Date, to provide sufficient time for the restructuring and related up-list of AMBS

Provided, however, that the sum of the Debt Exchange Factor for Avant plus the Debt Exchange Factor for New Notes (Debt) shall not exceed eighty percent (80%) in relation to the current outstanding unpaid principal amount of the convertible debt that is the subject of this Tender Exchange.

**Preferred Exchange:**

AMBS proposes to exchange the shares of Avant Diagnostics, Inc. (OTCMKST: AVDX) that it beneficially owns, for the preferred equity previously issued by AMBS, as follows:

- 1) "Preferred Exchange Amount Avant" shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 2) "Preferred Exchange Factor for Avant" shall be thirty-seven and one-half percent (37.50%)
- 3) "Number of Shares" in AVDX shall be a) the product the Preferred Exchange Amount Avant times the Preferred Exchange Factor for Avant, with such product divided by b) the lower of i) \$0.16 per share and ii) the share price of AVDX as of two (2) business days preceding the Closing Date as defined below ("AVDX Divisor"), with such AVDX Divisor being subject to a floor of \$0.12 per share ("AVDX Floor"), to estimate c) the number of shares, with final share amount issued to be rounded down (no fractional shares). For clarity, the AVDX Divisor and AVDX Floor herein for the Preferred Holders is intended to be the same as used for the Debt Exchange of Avant for the Debt Holders described above

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- 4) "Liquidation Terms for AVDX" as previously defined shall also apply to the Preferred Holder for these AVDX shares.
- 5) AVDX completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the Closing Date defined below, otherwise the Liquidation Terms for AVDX will not apply and the Holders are free to trade the shares.

Furthermore, AMBS proposes to exchange the new shares of common stock in AMBS via a new convertible note ("New Notes (Preferred)") with subsequent Conversion Terms and Trading Restrictions described below, for the preferred equity previously issued by AMBS, as follows:

- 6) "Preferred Exchange Amount AMBS" shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 7) "Preferred Exchange Factor for New Notes (Preferred)" shall be thirty-seven and one-half percent (37.50%)
- 8) "New Notes Principal Amount (Preferred)" of the New Notes (Preferred) shall be the product of a) Preferred Exchange Amount AMBS times the Preferred Exchange Factor for New Notes (Preferred), to estimate b) the principal amount of the New Notes (Preferred)
- 9) The New Notes AMBS (Preferred) will be non-interest bearing and will have an initial maturity date of nine months from the Tender Exchange Date, to provide sufficient time for the restructuring and related up-list of AMBS

Provided, however, that the sum of the Preferred Exchange Factor for Avant plus the Preferred Exchange Factor for New Notes (Preferred) shall not exceed seventy-five percent (75%) in relation to the total amount of preferred equity issued by AMBS to the Holder that is the subject of this Tender Exchange.

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**Conversion Terms & Trading  
Restrictions for New Notes  
(Debt) and New Notes  
(Preferred):**

The New Notes (Debt) and the New Notes (Preferred) will be subject to the following Conversion Terms and Trading Restrictions:

- 1 ) “Conversion Terms” as follows: conversion to new AMBS shares shall be permitted after the up-list of AMBS to NASDAQ or NYSE at price per share equal to or greater than the minimum price per share required for the up-list (“Up List Price”) and the passage of minimum time of any regulatory period for the shares being free to trade (“Free Trading Date”). After the up-list, the “New Notes Conversion Amount” shall be the Tranche Size (defined below) of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred) divided by 100% of the average price per share of AMBS for the immediately preceding twelve (12) trading days (“Determination Period”) with such share price subject to an increase cap of two hundred fifty percent (250%) of the Up List Price (“Conversion Price”) to estimate the number of new AMBS shares, with final share amount issued to be rounded down (no fractional shares). The daily liquidation by any Holder of such block of new AMBS shares as issued (“Tranche Block”) shall be limited to no more than 5% of the average trading volume of the prior five (5) trading days subject to a minimum of 0.3125% per trading day (derived from 25% divided by 80 trading days) times the Tranche Size defined below (“Liquidation Limit”). “Trading Restrictions” for these new AMBS shares are listed as 2) and 3) below:
- 2) For any sale proposed by any Holder of the new AMBS shares in excess of the Liquidation Limit size (i.e. a block trade), AMBS will have a) the right of first refusal to purchase such block at a price equal to the average price per share of the prior five (5) trading days using the closing price, and b) if not purchased by AMBS, AMBS will have approval rights of the counter party proposed by any Holder for such block trade

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- 3) "Tranche Size" shall be 25% of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred), and the Holder will be able to liquidate a maximum of the Tranche Size amount beginning at the next trading day after the date that is the earlier of i) nine (9) months from the Closing Date of this Tender Exchange defined below ("First Liquidation Interval") and ii) the first close of trading when that closing price for AMBS is greater than one hundred and fifty percent (150%) of the Up List Price (such AMBS price the "Qualifying Price"), and subsequently at four (4) month intervals thereafter ("Subsequent Liquidation Interval") in each case liquidating any Tranche Blocks subject to the Liquidation Limit of the Tranche Size continuously over such period; any unused amounts of a Tranche Size would be rolled to the next Liquidation Interval and eligible for sale in Tranche Block sizing (or aggregated for a block trade on terms as described above). During the Determination Period, there will be no trading or liquidation of shares. The intent of the Tranche Size and the liquidation intervals as defined is to enable the Holder to sell out 100% the position over time within approximately twenty-four months from the Free Trading Date
- 4) AMBS will ensure that there are sufficient AMBS shares in reserve prior to the execution of conversion with no delay to the Holders of New Notes (Debt) and the New Notes (Preferred)
- 5) AMBS completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the date of this LOI, otherwise the liquidation terms for AMBS as specified by clauses 1 through 3 of this section will not apply and the Holders are free to trade the shares

**New Class of Shares in Cutanogen:**

AMBS proposes to issue a new class of shares of its equity interest in Cutanogen ("New Class"), as follows:

- 1) "New Class Equity" shall be thirty-five percent (35%) of AMBS equity in Cutanogen determined as of the date of this LOI, such that after issuance of the New Class, AMBS will own sixty-five percent (65%) of the remaining common stock of Cutanogen
- 2) "New Class Debt %" shall be the percentage amount of the New Class Equity available for the Debt Holders in aggregate as twenty percent (20%)
- 3) "New Class Preferred %" shall be the percentage amount of the New Class Equity available for the Preferred Holders in aggregate as fifteen percent (15%)

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- 4) For any Debt Holder, its' "Debt Holder Allocation to Cutanogen" shall be determined as the *pro-rata* share of its principal investment in AMBS with respect to other current Debt Holders multiplied by New Class Debt %, noting that the sum of all such Debt Holder Allocation to Cutanogen shall equal the New Class Debt % of twenty percent (20%)
- 5 ) For any Preferred Holder, its' "Preferred Holder Allocation to Cutanogen" shall be determined as the *pro-rata* share of its equity investment in AMBS with respect to other current Preferred Holders multiplied by New Class Preferred %, noting that the sum of all such Preferred Holder Allocation to Cutanogen shall equal the New Class Preferred % of fifteen percent (15%)
- 6) The New Class shall a) have no voting rights, b) be subject to dilution
- 7 ) AMBS will have repurchase rights in its sole discretion for a period of thirty-six (36) months from the issuance date of the New Class for an aggregate repurchase amount of fifty million dollars (\$50,000,000)

Holder Name: \_\_\_\_\_

Debt Holder Allocation to Cutanogen: 10.5%

Preferred Holder Allocation to Cutanogen: 1.8%

*(indicative, subject to verification of related investment amounts)*

**Closing Date:**

Three (3) business days following the attainment of the conditions precedent listed below; provided, however in the event of a Funding Date (defined below), such closing date shall be no later than the Funding Closing Date (defined below).

**Funding Date and Funding Closing Date:**

In the event that any funding is agreed for a minimum of a) \$1.5 million for AMBS, or b) \$2.5 million for Cutanogen, or c) \$1.5 million for AVDX (for any such funding, a "Funding Date") the Holders agree to unconditionally release all of the assets of AMBS and a subordination of the Holders interests therein, by or before the first related closing date as agreed by the funding source ("Funding Closing Date").

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**Conditions Precedent:**

Documentation to evidence progress, completion or binding agreement to attain the following:

- 1) form of binding LOI from each Holder (convertible debt, preferred equity, etc.)
- 2) Letter of intent for the merger of AVDX and PHDx
- 3 ) Letter of intent for the investment of assets into AMBS by SeD BioMedical (or other entity owned by such owner) including a list of target assets
- 4 ) Summary of strategy for Cutanogen including a) documentation for the relationship with Alliqua, and b) prior to or contemporaneous with the first Funding Date, the issuance to Debt Holders and the Preferred Holders of the New Class of shares in Cutanogen
- 5) Debt Exchange agreement and closing docs
- 6) Preferred Exchange agreement and closing docs
- 7 ) Delivery of physical securities and notes by all Holders (including any warrants attached or issued) to escrow agent at location of closing & settlement
- 8) New securities to be issued to the Holder
- 9 ) Other documents, agreements, and requirements as identified by AMBS legal counsel as being necessary for closing the Tender Exchange

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**Exhibit B****Addendum to Tender Exchange Letter of Intent****January 3, 2017**

In addition to the terms agreed to in the binding letter of intent, January 3, 2017, the following terms will be incorporated into the definitive agreement. In the event of any inconsistency between these terms and the terms of such letter of intent, including Exhibit A letter attached thereto, the terms of this Addendum shall prevail.

## 1. General

- a. Management and Bankers have no intention of bringing variable rate financing into any of the transactions related to the Amaranthus restructure strategy. In the unlikely scenario that a variable transaction is engaged, the structured note holders will have the right of participation in these structures.
- b. New investors coming into either Amaranthus or Avant will be subject to a lock up period in parallel with the release of the structured and/or preferred holders' release from their lock up.
- c. The secured holders will stand still from any action for 90 days to complete the Avant merger, for 90 days to complete the Cutanogen financing and restructure, and for 120 days to complete the Amaranthus restructure and financing.
- d. The strategies for the AMBS, AVDX and Cutanogen will only be implemented upon the signing of the LOI and the cooperative support of the secured debt holders. Funding would be pursued immediately following the signing of the LOI. Successful funding for any of the two entities at the following levels would trigger the unconditional release of all assets of AMBS by the debt holders: \$2.5 million for Cutanogen, \$1.5 million for AVDX, or \$1.5 million for AMBS, accompanied by an asset injected by SED Biomedical into AMBS that is valued by a nationally recognized firm at a minimum of \$12.5 million.
- e. The majority of the Series E holders must be in support of the terms agreed to by the secured holders.
- f. Amaranthus will pay up to \$250,000 in aggregate for all of the Holder's legal counsel representing parties to the Debt Exchange and the Preferred Exchange based on submitted invoices and all back-up to the Holder, and if the aggregate of invoices is in excess of the Maximum Legal Costs, then the Maximum Legal Costs will be allocated *pro rata* to each Holder based on their respective investment amount, which *pro rata* share may be combined for convenience for Holders using the same legal counsel; provided after such allocation, any legal costs in excess of each Holder's allocation will be the responsibility of that Holder.

Initials: \_\_\_\_\_ / \_\_\_\_\_

- g. The valuation at which new money, in excess of \$1 million, comes into the public entities will be accompanied by a fairness opinion.

2. Amarantus

- a. An LOI between Amarantus and Mr. Chan's SED Biomedical, concerning injection of assets from SED Biomedical to Amarantus, will be filed with the SEC within 30 days of the signing of the LOI. A list of the targeted assets will be included in the LOI filed.
- b. Shares will be reserved for conversion by secured and preferred holders.

3. Cutanogen

- a. Secured and preferred holders will have the ability to sell their interest in Cutanogen to a third party upon approval from the newly appointed board of directors of Cutanogen.
- b. A letter of intent is being drafted for Alliqua to provide management infrastructure to Cutanogen on an interim basis.

4. Avant-PHDx

- a. An LOI between Avant and PHDx, concerning the merger of the two companies, will be filed with the SEC within 30 days of the signing of the LOI.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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Page 15 of 15

Very truly yours,

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

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

Gerald E. Commissiong

President & Chief Executive Officer

Agreed and Accepted by:

\_\_\_\_\_

By:

\_\_\_\_\_

Name:

\_\_\_\_\_

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

Date: \_\_\_\_\_

Initials: \_\_\_\_\_ / \_\_\_\_\_

\_\_\_\_\_

CONFIDENTIAL

Re: Letter of Intent for Tender Exchange of Existing Equity Securities  
Prepared for: \_\_\_\_\_

Dear \_\_\_\_\_:

This letter agreement sets forth our agreement and understanding as to the essential terms of the tender exchange of certain existing equity securities of Amarantus BioScience Holdings, Inc. (the "Company") located at 315 Montgomery Street, Suite 900, San Francisco, CA 94104, including surrender of all warrants owned by \_\_\_\_\_ ("Holder") and a collateral release of assets of the Company, in return for receipt of newly issued equity securities in the Company ("Tender Exchange") as duly authorized and issued by the Company. The parties intend this letter agreement to be binding and enforceable, and that it will inure to the benefit of the parties and their respective successors and assigns.

1. **Definitive Legal Agreements.** The purpose of this letter agreement constructed as a binding Letter of Intent (this "LOI") is to set forth certain specific financial terms of the Tender Exchange for the Holder, and the conditions precedent to be achieved by or before the Closing Date (defined below). Legal agreements, releases, the forms of the securities, and any other documents that may be required to attain the completion of the conditions precedent for the Tender Exchange ("Legal Agreements") shall contain customary conditions, representations, warranties, covenants, indemnities and other terms, including terms substantially as set forth in this LOI and in the Tender Exchange Term Sheet attached as Exhibit A hereto. Upon execution of this LOI, the parties hereto will continue in good faith to commit their resources to negotiate, prepare, and review the Legal Agreements required to execute the Tender Exchange as soon as practicable, but no later than the expiration of the Stand Still Period (as defined in Paragraph 3 below), as such may be extended pursuant to Paragraph 3. A majority of all such Holders will be required to agree and execute the Legal Agreements, and the Tender Exchange completed as soon as possible. The parties agree that the Legal Agreements shall incorporate the financial terms as provided herein, which terms shall not be subject to re-negotiation.

2. **Termination.** AMBS retains the sole right to terminate this LOI, in the event that a) less than a majority of Holders of certain equity securities respectively execute this form of LOI and subsequently the related Legal Agreements as may be required ("Lack of Majority"), and/or b) failure to attain completion of conditions precedent by or before the Closing Date. AMBS will advise the Holders by written notice at any time after the earliest of the following to occur (a "Termination Event"): (i) Lack of Majority; or (ii) absence of agreement on non-financial terms of the Legal Agreements and/or failure to attain completion of conditions precedent on a timely basis by the Closing Date.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 2 of 9

3 . **Stand Still Period.** Unless this LOI is terminated as provided in Paragraph 2 above, for a period from the date of execution of this LOI up to and including the Closing Date (the "Stand Still Period"), each Holder agrees not to, directly or indirectly, and shall cause its employees, shareholders and directors not to, directly or indirectly, solicit, encourage, contact, enable or negotiate with any other person regarding the pledge, hypothecation, lien, sale, license or other transfer of the assets, debt, and equity securities of AMBS that are the subject of the Tender Exchange. The parties may extend the Stand Still Period by mutual agreement on a change to the Closing Date if such mutual agreement is by or before the previously agreed Closing Date. During the Stand Still Period AMBS maintains the right to operate its business including as required any financings related thereto.

4 . **Closing Date:** The closing date shall be determined as 3 business days following the attainment of the conditions precedent as specified in Exhibit A ("Closing Date"); provided, however in the event of a Funding Date (defined in Exhibit A below), such closing date shall be no later than the Funding Closing Date (defined in Exhibit A below).

5. **Confidentiality; Restrictions on Use.** Each of AMBS and the Holder will use the Due Diligence Information (defined below) solely for the purpose of completing the Legal Agreements and unless and until the parties consummate the Tender Exchange, its affiliates, directors, officers, employees, advisors, and agents (the Purchaser's "Representatives") will keep the Due Diligence Information strictly confidential. Each of AMBS and the Holder will disclose the Due Diligence Information only to those its' respective Representatives who need to know such information for the purpose of consummating the Tender Exchange. Each of AMBS and the Holder agrees to be responsible for any breach of this paragraph 5 by any of its' respective Representatives. In the event the Tender Exchange is not consummated, each of AMBS and the Holder the Purchaser will certify in writing that all such materials or copies of such materials have been destroyed, except for the retention as may be required by law or securities exchange regulations. The Holder will not use any Due Diligence Information ("Restrictions") in the event that the Tender Exchange is not consummated. Neither party shall make any public announcement or public statement or respond to any press inquiry pertaining to this LOI or the Tender Exchange without the prior written approval of the other party, except for disclosures (a) as may be required by law or securities exchange regulations or (b) to Representatives and existing shareholders or funding parties, provided such disclosure is on a need-to-know basis and subject to non-use and non-disclosure provisions consistent with the confidentiality provisions herein. The provisions of this paragraph 5 will survive the termination of this LOI.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 3 of 9

6 . **Due Diligence.** In connection with the due diligence hereunder, during the Stand Still Period, the Holder and AMBS will cause its representatives to make available the necessary data, information and materials required to understand the rationale of the Tender Exchange and to complete the Legal Agreements (“Due Diligence Information”) to the other party or its Representatives as they may reasonably request, in all cases subject to the confidentiality obligations specified in clause 5.

7 . **Corporate Authority.** Each party acknowledges it has all requisite corporate power and authority to enter into this LOI and, to consummate the Tender Exchange as contemplated herein. By execution of this LOI including Exhibit A, each party affirms that this LOI is not subsequently subject to any board ratification or approval.

8. **Conditions to Obligation.** The Holder and AMBS will be obligated to consummate the Tender Exchange unless AMBS has failed to obtain completion of the conditions precedent, notwithstanding AMBS’ best efforts to attain agreement with the Holder on the Legal Agreements that are required in connection with the Tender Exchange.

9 . **Miscellaneous.** This LOI (together with Exhibit A hereto) and the Legal Agreements shall be governed by and construed in accordance with the laws of the State of New York, without regard to conflicts of laws principles. This LOI together with Exhibit A hereto is the entire agreement between the parties with respect to the subject matter herein and may be modified only by a subsequent written agreement signed by both parties. Each of AMBS and the Holder will be solely responsible for its own expenses, including legal fees, incurred in connection with the Tender Exchange, including the negotiation and execution of the Legal Agreements. By their signatures set forth below, the parties hereby agree to this LOI together with Exhibit A hereto as of the last date of the signatures set forth below.

*(Signatures on following page)*

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 4 of 9

If you are in agreement with the terms of this letter agreement, please initial each page with no other changes and sign in the space provided below and return that signed copy back to my attention by or before 12 noon EST on Friday December 23, 2016. Upon receipt of a signed copy of this letter, we will proceed with our plans for consummating the Tender Exchange in a timely manner.

Very truly yours,

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

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

Gerald E. Commissiong

President & Chief Executive Officer

Agreed and Accepted by:

\_\_\_\_\_ :

By:

\_\_\_\_\_

Name:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_

Initials: \_\_\_\_\_ / \_\_\_\_\_

\_\_\_\_\_

Exhibit A

To Binding Letter of Intent between

Amarantus BioScience Holdings Inc. (OTCMKTS: AMBS) and

Holder: \_\_\_\_\_

Amarantus BioScience Holdings Inc. (“AMBS” or the “Company”) hereby proposes the indicative terms and conditions of its restructuring (“Restructuring”) including terms for the tender exchange of existing preferred equity (“Preferred Exchange”) (for each type of security, an “Exchange” and collectively, with other debt securities, the “Tender Exchange”) as summarized for you (“Holder”) on the following page Table A for the Preferred Exchange, [with a summary overall as seventy-five percent (75%) the preferred equity will be used for the Preferred Exchange, as further described below.

**Documentation:**

Terms herein, except for the financial terms of the Exchange summarized herein which are agreed, are subject to agreement and execution of final documentation by or before the Closing Date (defined below) of each security Exchange comprising the Tender Exchange that is required to occur simultaneously. AMBS will pay up to \$100,000 in aggregate (“Maximum Legal Costs”) for all of the Holder’s legal counsel representing parties to the Debt Exchange and the Preferred Exchange based on submitted invoices and all back-up to the Holder, and if the aggregate of invoices is in excess of the Maximum Legal Costs, then the Maximum Legal Costs will be allocated *pro rata* to each Holder based on their respective investment amount, which *pro rata* share may be combined for convenience for Holders using the same legal counsel; provided after such allocation, any legal costs in excess of each Holder’s allocation will be the responsibility of that Holder.

**Preferred Exchange:**

AMBS proposes to exchange the shares of Avant Diagnostics, Inc. (OTCMKST: AVDX) that it beneficially owns, for the preferred equity previously issued by AMBS, as follows:

- 1 ) “Preferred Exchange Amount Avant” shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 2) “Preferred Exchange Factor for Avant” shall be thirty-seven and one-half percent (37.50%)

Initials: \_\_\_\_\_ / \_\_\_\_\_

- 3) “Number of Shares” in AVDX shall be a) the product the Preferred Exchange Amount Avant times the Preferred Exchange Factor for Avant, with such product divided by b) the lower of i) \$0.16 per share and ii) the share price of AVDX as of two (2) business days preceding the Closing Date as defined below (“AVDX Divisor”), with such AVDX Divisor being subject to a floor of \$0.12 per share (“AVDX Floor”), to estimate c) the number of shares, with final share amount issued to be rounded down (no fractional shares). For clarity, the AVDX Divisor and AVDX Floor herein for the Preferred Holders is intended to be the same as used for the Debt Exchange of Avant for the Debt Holders described above
- 4) “Liquidation Terms for AVDX” to be memorialized on the legend of the AVDX securities as follows: the Preferred Holder shall be allowed to sell that amount of the AVDX common stock equal to i) on a daily basis, up to five percent (5%) of the average trading volume subject to ii) a maximum of 0.50% (1/2%) of the outstanding shares of AVDX and a minimum of 0.4167% per trading day (derived from 25% divided by 60 trading days) times twenty-five percent (25%) of the Number of Shares (“AVDX Leak Out Percentage”) after the date that is the earlier of iii) the quarterly period end date (each such quarter, an “AVDX Liquidation Interval”) following nine (9) months after the Closing Date of this Tender Exchange defined below and for the next two (2) successive quarters thereafter (“AVDX Quarterly Liquidation Amount”) and iv) the first close of trading no earlier than six (6) months after the Closing Date of this Tender Exchange defined below when that closing price for AVDX is greater than one hundred and fifty percent (150%) of the AVDX Divisor (such AVDX price the “AVDX Qualifying Price”) (such first date, the “AVDX First Liquidation Date”); provided, however the such liquidation is on a non-cumulative basis so that if the Preferred Holder did not sell any of its AVDX shares in the previous AVDX Liquidation Interval, the maximum amount of shares sold in any subsequent AVDX Liquidation Interval cannot be greater than the AVDX Quarterly Liquidation Amount for that quarter; and finally, there will be no liquidation restrictions after the third successive quarterly period following the AVDX First Liquidation Date.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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- 5) AVDX completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the Closing Date defined below, otherwise the Liquidation Terms for AVDX will not apply and the Holders are free to trade the shares.

Furthermore, AMBS proposes to exchange the new shares of common stock in AMBS via a new convertible note (“New Notes (Preferred)”) with subsequent Conversion Terms and Trading Restrictions described below, for the preferred equity previously issued by AMBS, as follows:

- 6) “Preferred Exchange Amount AMBS” shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 7) “Preferred Exchange Factor for New Notes (Preferred)” shall be thirty-seven and one-half percent (37.50%)
- 8) “New Notes Principal Amount (Preferred)” of the New Notes (Preferred) shall be the product of a) Preferred Exchange Amount AMBS times the Preferred Exchange Factor for New Notes (Preferred), to estimate b) the principal amount of the New Notes (Preferred)
- 9) The New Notes AMBS (Preferred) will be non-interest bearing and will have an initial maturity date of nine months from the Tender Exchange Date, to provide sufficient time for the restructuring and related up-list of AMBS

Provided, however, that the sum of the Preferred Exchange Factor for Avant plus the Preferred Exchange Factor for New Notes (Preferred) shall not exceed seventy-five percent (75%) in relation to the total amount of preferred equity issued by AMBS to the Holder that is the subject of this Tender Exchange.

**Conversion Terms & Trading Restrictions for New Notes (Preferred):**

The New Notes (Preferred) will be subject to the following Conversion Terms and Trading Restrictions, noting that these are to be the same as for New Notes Debt that are issued to Debt Holders under their Debt Exchange:

- 1) “Conversion Terms” as follows: conversion to new AMBS shares shall be permitted after the up-list of AMBS to NASDAQ or NYSE at price per share equal to or greater than the minimum price per share required for the up-list (“Up List Price”) and the passage of minimum time of any regulatory period for the shares being free to trade (“Free Trading Date”). After the up-list, the “New Notes Conversion Amount” shall be the Tranche Size (defined below) of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred) divided by 100% of the average price per share of AMBS for the immediately preceding twelve (12) trading days (“Determination Period”) with such share price subject to an increase cap of two hundred fifty percent (250%) of the Up List Price (“Conversion Price”) to estimate the number of new AMBS shares, with final share amount issued to be rounded down (no fractional shares). The daily liquidation by any Holder of such block of new AMBS shares as issued (“Tranche Block”) shall be limited to no more than 5% of the average trading volume of the prior five (5) trading days subject to a minimum of 0.3125% per trading day (derived from 25% divided by 80 trading days) times the Tranche Size defined below (“Liquidation Limit”). “Trading Restrictions” for these new AMBS shares are listed as 2) and 3) below:

Initials: \_\_\_\_\_ / \_\_\_\_\_

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- 2) For any sale proposed by any Holder of the new AMBS shares in excess of the Liquidation Limit size (i.e. a block trade), AMBS will have a) the right of first refusal to purchase such block at a price equal to the average price per share of the prior five (5) trading days using the closing price, and b) if not purchased by AMBS, AMBS will have approval rights of the counter party proposed by any Holder for such block trade
- 3) “Tranche Size” shall be 25% of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred), and the Holder will be able to liquidate a maximum of the Tranche Size amount beginning at the next trading day after the date that is the earlier of i) nine (9) months from the Closing Date of this Tender Exchange defined below (“First Liquidation Interval”) and ii) the first close of trading when that closing price for AMBS is greater than one hundred and fifty percent (150%) of the Up List Price (such AMBS price the “Qualifying Price”), and subsequently at four (4) month intervals thereafter (“Subsequent Liquidation Interval”) in each case liquidating any Tranche Blocks subject to the Liquidation Limit of the Tranche Size continuously over such period; any unused amounts of a Tranche Size would be rolled to the next Liquidation Interval and eligible for sale in Tranche Block sizing (or aggregated for a block trade on terms as described above). During the Determination Period, there will be no trading or liquidation of shares. The intent of the Tranche Size and the liquidation intervals as defined is to enable the Holder to sell out 100% the position over time within approximately twenty-four months from the Free Trading Date
- 4) AMBS will ensure that there are sufficient AMBS shares in reserve prior to the execution of conversion with no delay to the Holders of New Notes (Debt) and the New Notes (Preferred)
- 5) AMBS completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the date of this LOI, otherwise the liquidation terms for AMBS as specified by clauses 1 through 3 of this section will not apply and the Holders are free to trade the shares

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**New Class of Shares in Cutanogen:**

AMBS proposes to issue a new class of shares of its equity interest in Cutanogen (“New Class”), as follows:

- 1) “New Class Equity Preferred %” shall be the percentage amount of the New Class Equity available for the Preferred Holders in aggregate as fifteen percent (15%)
- 2) For any Preferred Holder, its’ “Preferred Holder Allocation to Cutanogen” shall be determined as the *pro-rata* share of its equity investment in AMBS with respect to other current Preferred Holders multiplied by New Class Equity Preferred %, noting that the sum of all such Preferred Holder Allocation to Cutanogen shall equal the New Class Equity Preferred % of fifteen percent (15%)
- 3) The New Class shall a) have no voting rights, b) be subject to dilution
- 4) AMBS will have repurchase rights in its sole discretion for a period of thirty-six (36) months from the issuance date of the New Class for an aggregate repurchase amount of fifty million dollars (\$50,000,000)

Holder Name: \_\_\_\_\_:

Preferred Holder Allocation to Cutanogen: 0.8%

*(indicative, subject to verification of related investment amounts)*

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Closing Date:** Three (3) business days following the attainment of the conditions precedent listed below; provided, however in the event of a Funding Date (defined below), such closing date shall be no later than the Funding Closing Date (defined below).

**Funding Date and Funding Closing Date:** In the event that any funding is agreed for a minimum of a) \$1.5 million for AMBS, or b) \$2.5 million for Cutanogen, or c) \$1.5 million for AVDX (for any such funding, a "Funding Date") the Holders agree to unconditionally release all of the assets of AMBS and a subordination of the Holders interests therein, by or before the first related closing date as agreed by the funding source ("Funding Closing Date").

**Conditions Precedent:** Documentation to evidence progress, completion or binding agreement to attain the following:

- 1) form of binding LOI from each Holder (convertible debt, preferred equity, etc.)
- 2) Letter of intent for the merger of AVDX and PHDx
- 3) Letter of intent for the investment of assets into AMBS by SeD BioMedical (or other entity owned by such owner) including a list of target assets
- 4 ) Summary of strategy for Cutanogen including a) documentation for the relationship with Alliqua, and b) prior to or contemporaneous with the first Funding Date, the issuance to Debt Holders and the Preferred Holders of the New Class of shares in Cutanogen
- 5) Debt Exchange agreement and closing docs
- 6) Preferred Exchange agreement and closing docs
- 7 ) Delivery of physical securities and notes by all Holders (including any warrants attached or issued) to escrow agent at location of closing & settlement
- 8) New securities to be issued to the Holder
- 9) Other documents, agreements, and requirements as identified by AMBS legal counsel as being necessary for closing the Tender Exchange

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CONFIDENTIAL

Re: Letter of Intent for Tender Exchange of Existing Equity Securities  
 Prepared for: \_\_\_\_\_

Dear \_\_\_\_\_:

This letter agreement sets forth our agreement and understanding as to the essential terms of the tender exchange of certain existing equity securities of Amarantus BioScience Holdings, Inc. (the "Company") located at 315 Montgomery Street, Suite 900, San Francisco, CA 94104, including surrender of all warrants owned by \_\_\_\_\_ ("Holder") and a collateral release of assets of the Company, in return for receipt of newly issued equity securities in the Company ("Tender Exchange") as duly authorized and issued by the Company. The parties intend this letter agreement to be binding and enforceable, and that it will inure to the benefit of the parties and their respective successors and assigns.

1. **Definitive Legal Agreements.** The purpose of this letter agreement constructed as a binding Letter of Intent (this "LOI") is to set forth certain specific financial terms of the Tender Exchange for the Holder, and the conditions precedent to be achieved by or before the Closing Date (defined below). Legal agreements, releases, the forms of the securities, and any other documents that may be required to attain the completion of the conditions precedent for the Tender Exchange ("Legal Agreements") shall contain customary conditions, representations, warranties, covenants, indemnities and other terms, including terms substantially as set forth in this LOI and in the Tender Exchange Term Sheet attached as Exhibit A hereto. Upon execution of this LOI, the parties hereto will continue in good faith to commit their resources to negotiate, prepare, and review the Legal Agreements required to execute the Tender Exchange as soon as practicable, but no later than the expiration of the Stand Still Period (as defined in Paragraph 3 below), as such may be extended pursuant to Paragraph 3. A majority of all such Holders will be required to agree and execute the Legal Agreements, and the Tender Exchange completed as soon as possible. The parties agree that the Legal Agreements shall incorporate the financial terms as provided herein, which terms shall not be subject to re-negotiation.

2. **Termination.** AMBS retains the sole right to terminate this LOI, in the event that a) less than a majority of Holders of certain equity securities respectively execute this form of LOI and subsequently the related Legal Agreements as may be required ("Lack of Majority"), and/or b) failure to attain completion of conditions precedent by or before the Closing Date. AMBS will advise the Holders by written notice at any time after the earliest of the following to occur (a "Termination Event"): (i) Lack of Majority; or (ii) absence of agreement on non-financial terms of the Legal Agreements and/or failure to attain completion of conditions precedent on a timely basis by the Closing Date.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 2 of 10

3 . **Stand Still Period.** Unless this LOI is terminated as provided in Paragraph 2 above, for a period from the date of execution of this LOI up to and including the Closing Date (the "Stand Still Period"), each Holder agrees not to, directly or indirectly, and shall cause its employees, shareholders and directors not to, directly or indirectly, solicit, encourage, contact, enable or negotiate with any other person regarding the pledge, hypothecation, lien, sale, license or other transfer of the assets, debt, and equity securities of AMBS that are the subject of the Tender Exchange. The parties may extend the Stand Still Period by mutual agreement on a change to the Closing Date if such mutual agreement is by or before the previously agreed Closing Date. During the Stand Still Period AMBS maintains the right to operate its business including as required any financings related thereto.

4 . **Closing Date:** The closing date shall be determined as 3 business days following the attainment of the conditions precedent as specified in Exhibit A ("Closing Date"); provided, however in the event of a Funding Date (defined in Exhibit A below), such closing date shall be no later than the Funding Closing Date (defined in Exhibit A below).

5. **Confidentiality; Restrictions on Use.** Each of AMBS and the Holder will use the Due Diligence Information (defined below) solely for the purpose of completing the Legal Agreements and unless and until the parties consummate the Tender Exchange, its affiliates, directors, officers, employees, advisors, and agents (the Purchaser's "Representatives") will keep the Due Diligence Information strictly confidential. Each of AMBS and the Holder will disclose the Due Diligence Information only to those its' respective Representatives who need to know such information for the purpose of consummating the Tender Exchange. Each of AMBS and the Holder agrees to be responsible for any breach of this paragraph 5 by any of its' respective Representatives. In the event the Tender Exchange is not consummated, each of AMBS and the Holder the Purchaser will certify in writing that all such materials or copies of such materials have been destroyed, except for the retention as may be required by law or securities exchange regulations. The Holder will not use any Due Diligence Information ("Restrictions") in the event that the Tender Exchange is not consummated. Neither party shall make any public announcement or public statement or respond to any press inquiry pertaining to this LOI or the Tender Exchange without the prior written approval of the other party, except for disclosures (a) as may be required by law or securities exchange regulations or (b) to Representatives and existing shareholders or funding parties, provided such disclosure is on a need-to-know basis and subject to non-use and non-disclosure provisions consistent with the confidentiality provisions herein. The provisions of this paragraph 5 will survive the termination of this LOI.

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 3 of 10

6 . **Due Diligence.** In connection with the due diligence hereunder, during the Stand Still Period, the Holder and AMBS will cause its representatives to make available the necessary data, information and materials required to understand the rationale of the Tender Exchange and to complete the Legal Agreements (“Due Diligence Information”) to the other party or its Representatives as they may reasonably request, in all cases subject to the confidentiality obligations specified in clause 5.

7 . **Corporate Authority.** Each party acknowledges it has all requisite corporate power and authority to enter into this LOI and, to consummate the Tender Exchange as contemplated herein. By execution of this LOI including Exhibit A, each party affirms that this LOI is not subsequently subject to any board ratification or approval.

8. **Conditions to Obligation.** The Holder and AMBS will be obligated to consummate the Tender Exchange unless AMBS has failed to obtain completion of the conditions precedent, notwithstanding AMBS’ best efforts to attain agreement with the Holder on the Legal Agreements that are required in connection with the Tender Exchange.

9 . **Miscellaneous.** This LOI (together with Exhibit A hereto) and the Legal Agreements shall be governed by and construed in accordance with the laws of the State of New York, without regard to conflicts of laws principles. This LOI together with Exhibit A hereto is the entire agreement between the parties with respect to the subject matter herein and may be modified only by a subsequent written agreement signed by both parties. Each of AMBS and the Holder will be solely responsible for its own expenses, including legal fees, incurred in connection with the Tender Exchange, including the negotiation and execution of the Legal Agreements. By their signatures set forth below, the parties hereby agree to this LOI together with Exhibit A hereto as of the last date of the signatures set forth below.

*(Signatures on following page)*

Initials: \_\_\_\_\_ / \_\_\_\_\_

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**Binding LOI for Tender Exchange**

Page 4 of 10

If you are in agreement with the terms of this letter agreement, please initial each page with no other changes and sign in the space provided below and return that signed copy back to my attention by or before 12 noon EST on Friday December 23, 2016. Upon receipt of a signed copy of this letter, we will proceed with our plans for consummating the Tender Exchange in a timely manner.

Very truly yours,

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

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

Gerald E. Commissiong

President & Chief Executive Officer

Agreed and Accepted by:

\_\_\_\_\_ :

By:

\_\_\_\_\_

Name:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_

Initials: \_\_\_\_\_ / \_\_\_\_\_

\_\_\_\_\_

**Exhibit A**

To Binding Letter of Intent between

Amarantus BioScience Holdings Inc. (OTCMKTS: AMBS) and

Holder: \_\_\_\_\_

Amarantus BioScience Holdings Inc. (“AMBS” or the “Company”) hereby proposes the indicative terms and conditions of its restructuring (“Restructuring”) including terms for the tender exchange of existing preferred equity (“Preferred Exchange”) (for each type of security, an “Exchange” and collectively, with other debt securities, the “Tender Exchange”) as summarized for you (“Holder”) on the following page Table A for the Preferred Exchange, [with a summary overall as seventy-five percent (75%) the preferred equity will be used for the Preferred Exchange, as further described below.

**Documentation:** Terms herein, except for the financial terms of the Exchange summarized herein which are agreed, are subject to agreement and execution of final documentation by or before the Closing Date (defined below) of each security Exchange comprising the Tender Exchange that is required to occur simultaneously. AMBS will pay up to \$100,000 in aggregate (“Maximum Legal Costs”) for all of the Holder’s legal counsel representing parties to the Debt Exchange and the Preferred Exchange based on submitted invoices and all back-up to the Holder, and if the aggregate of invoices is in excess of the Maximum Legal Costs, then the Maximum Legal Costs will be allocated *pro rata* to each Holder based on their respective investment amount, which *pro rata* share may be combined for convenience for Holders using the same legal counsel; provided after such allocation, any legal costs in excess of each Holder’s allocation will be the responsibility of that Holder.

**Preferred Exchange:** AMBS proposes to exchange the shares of Avant Diagnostics, Inc. (OTCMKST: AVDX) that it beneficially owns, for the preferred equity previously issued by AMBS, as follows:

- 1 ) “Preferred Exchange Amount Avant” shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 2) “Preferred Exchange Factor for Avant” shall be thirty-seven and one-half percent (37.50%)

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- 3) “Number of Shares” in AVDX shall be a) the product the Preferred Exchange Amount Avant times the Preferred Exchange Factor for Avant, with such product divided by b) the lower of i) \$0.16 per share and ii) the share price of AVDX as of two (2) business days preceding the Closing Date as defined below (“AVDX Divisor”), with such AVDX Divisor being subject to a floor of \$0.12 per share (“AVDX Floor”), to estimate c) the number of shares, with final share amount issued to be rounded down (no fractional shares). For clarity, the AVDX Divisor and AVDX Floor herein for the Preferred Holders is intended to be the same as used for the Debt Exchange of Avant for the Debt Holders described above
  
- 4) “Liquidation Terms for AVDX” to be memorialized on the legend of the AVDX securities as follows: the Preferred Holder shall be allowed to sell that amount of the AVDX common stock equal to i) on a daily basis, up to five percent (5%) of the average trading volume subject to ii) a maximum of 0.50% (1/2%) of the outstanding shares of AVDX and a minimum of 0.4167% per trading day (derived from 25% divided by 60 trading days) times twenty-five percent (25%) of the Number of Shares (“AVDX Leak Out Percentage”) after the date that is the earlier of iii) the quarterly period end date (each such quarter, an “AVDX Liquidation Interval”) following nine (9) months after the Closing Date of this Tender Exchange defined below and for the next two (2) successive quarters thereafter (“AVDX Quarterly Liquidation Amount”) and iv) the first close of trading no earlier than six (6) months after the Closing Date of this Tender Exchange defined below when that closing price for AVDX is greater than one hundred and fifty percent (150%) of the AVDX Divisor (such AVDX price the “AVDX Qualifying Price”) (such first date, the “AVDX First Liquidation Date”); provided, however the such liquidation is on a non-cumulative basis so that if the Preferred Holder did not sell any of its AVDX shares in the previous AVDX Liquidation Interval, the maximum amount of shares sold in any subsequent AVDX Liquidation Interval cannot be greater than the AVDX Quarterly Liquidation Amount for that quarter; and finally, there will be no liquidation restrictions after the third successive quarterly period following the AVDX First Liquidation Date.

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- 5) AVDX completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the Closing Date defined below, otherwise the Liquidation Terms for AVDX will not apply and the Holders are free to trade the shares.

Furthermore, AMBS proposes to exchange the new shares of common stock in AMBS via a new convertible note ("New Notes (Preferred)") with subsequent Conversion Terms and Trading Restrictions described below, for the preferred equity previously issued by AMBS, as follows:

- 6) "Preferred Exchange Amount AMBS" shall be for the stated value of previously issued preferred equity and for the surrender of all warrants issued therewith as of the Closing Date
- 7) "Preferred Exchange Factor for New Notes (Preferred)" shall be thirty-seven and one-half percent (37.50%)
- 8) "New Notes Principal Amount (Preferred)" of the New Notes (Preferred) shall be the product of a) Preferred Exchange Amount AMBS times the Preferred Exchange Factor for New Notes (Preferred), to estimate b) the principal amount of the New Notes (Preferred)
- 9) The New Notes AMBS (Preferred) will be non-interest bearing and will have an initial maturity date of nine months from the Tender Exchange Date, to provide sufficient time for the restructuring and related up-list of AMBS

Provided, however, that the sum of the Preferred Exchange Factor for Avant plus the Preferred Exchange Factor for New Notes (Preferred) shall not exceed seventy-five percent (75%) in relation to the total amount of preferred equity issued by AMBS to the Holder that is the subject of this Tender Exchange.

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**Conversion Terms & Trading Restrictions for New Notes (Preferred):**

The New Notes (Preferred) will be subject to the following Conversion Terms and Trading Restrictions, noting that these are to be the same as for New Notes Debt that are issued to Debt Holders under their Debt Exchange:

- 1) "Conversion Terms" as follows: conversion to new AMBS shares shall be permitted after the up-list of AMBS to NASDAQ or NYSE at price per share equal to or greater than the minimum price per share required for the up-list ("Up List Price") and the passage of minimum time of any regulatory period for the shares being free to trade ("Free Trading Date"). After the up-list, the "New Notes Conversion Amount" shall be the Tranche Size (defined below) of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred) divided by 100% of the average price per share of AMBS for the immediately preceding twelve (12) trading days ("Determination Period") with such share price subject to an increase cap of two hundred fifty percent (250%) of the Up List Price ("Conversion Price") to estimate the number of new AMBS shares, with final share amount issued to be rounded down (no fractional shares). The daily liquidation by any Holder of such block of new AMBS shares as issued ("Tranche Block") shall be limited to no more than 5% of the average trading volume of the prior five (5) trading days subject to a minimum of 0.3125% per trading day (derived from 25% divided by 80 trading days) times the Tranche Size defined below ("Liquidation Limit"). "Trading Restrictions" for these new AMBS shares are listed as 2) and 3) below:
- 2) For any sale proposed by any Holder of the new AMBS shares in excess of the Liquidation Limit size (i.e. a block trade), AMBS will have a) the right of first refusal to purchase such block at a price equal to the average price per share of the prior five (5) trading days using the closing price, and b) if not purchased by AMBS, AMBS will have approval rights of the counter party proposed by any Holder for such block trade
- 3) "Tranche Size" shall be 25% of the New Notes Principal Amount (Debt) or New Notes Principal Amount (Preferred), and the Holder will be able to liquidate a maximum of the Tranche Size amount beginning at the next trading day after the date that is the earlier of i) nine (9) months from the Closing Date of this Tender Exchange defined below ("First Liquidation Interval") and ii) the first close of trading when that closing price for AMBS is greater than one hundred and fifty percent (150%) of the Up List Price (such AMBS price the "Qualifying Price"), and subsequently at four (4) month intervals thereafter ("Subsequent Liquidation Interval") in each case liquidating any Tranche Blocks subject to the Liquidation Limit of the Tranche Size continuously over such period; any unused amounts of a Tranche Size would be rolled to the next Liquidation Interval and eligible for sale in Tranche Block sizing (or aggregated for a block trade on terms as described above). During the Determination Period, there will be no trading or liquidation of shares. The intent of the Tranche Size and the liquidation intervals as defined is to enable the Holder to sell out 100% the position over time within approximately twenty-four months from the Free Trading Date

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- 4) AMBS will ensure that there are sufficient AMBS shares in reserve prior to the execution of conversion with no delay to the Holders of New Notes (Debt) and the New Notes (Preferred)
- 5) AMBS completes the up-listing of its equity including compliance with reporting requirements within nine (9) months from the date of this LOI, otherwise the liquidation terms for AMBS as specified by clauses 1 through 3 of this section will not apply and the Holders are free to trade the shares

**New Class of Shares in Cutanogen:**

AMBS proposes to issue a new class of shares of its equity interest in Cutanogen (“New Class”), as follows:

- 1) “New Class Equity Preferred %” shall be the percentage amount of the New Class Equity available for the Preferred Holders in aggregate as fifteen percent (15%)
- 2) For any Preferred Holder, its’ “Preferred Holder Allocation to Cutanogen” shall be determined as the *pro-rata* share of its equity investment in AMBS with respect to other current Preferred Holders multiplied by New Class Equity Preferred %, noting that the sum of all such Preferred Holder Allocation to Cutanogen shall equal the New Class Equity Preferred % of fifteen percent (15%)
- 3) The New Class shall a) have no voting rights, b) be subject to dilution
- 4) AMBS will have repurchase rights in its sole discretion for a period of thirty-six (36) months from the issuance date of the New Class for an aggregate repurchase amount of fifty million dollars (\$50,000,000)

Holder Name: \_\_\_\_\_ :  
Preferred Holder Allocation to Cutanogen: %  
*(indicative, subject to verification of related investment amounts)*

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**Closing Date:** Three (3) business days following the attainment of the conditions precedent listed below; provided, however in the event of a Funding Date (defined below), such closing date shall be no later than the Funding Closing Date (defined below).

**Funding Date and Funding Closing Date:** In the event that any funding is agreed for a minimum of a) \$1.5 million for AMBS, or b) \$2.5 million for Cutanogen, or c) \$1.5 million for AVDX (for any such funding, a "Funding Date") the Holders agree to unconditionally release all of the assets of AMBS and a subordination of the Holders interests therein, by or before the first related closing date as agreed by the funding source ("Funding Closing Date").

**Conditions Precedent:** Documentation to evidence progress, completion or binding agreement to attain the following:

- 1) form of binding LOI from each Holder (convertible debt, preferred equity, etc.)
- 2) Letter of intent for the merger of AVDX and PHDx
- 3 ) Letter of intent for the investment of assets into AMBS by SeD BioMedical (or other entity owned by such owner) including a list of target assets
- 4 ) Summary of strategy for Cutanogen including a) documentation for the relationship with Alliqua, and b) prior to or contemporaneous with the first Funding Date, the issuance to Debt Holders and the Preferred Holders of the New Class of shares in Cutanogen
- 5) Debt Exchange agreement and closing docs
- 6) Preferred Exchange agreement and closing docs
- 7 ) Delivery of physical securities and notes by all Holders (including any warrants attached or issued) to escrow agent at location of closing & settlement
- 8) New securities to be issued to the Holder
- 9) Other documents, agreements, and requirements as identified by AMBS legal counsel as being necessary for closing the Tender Exchange

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**SECURITIES PURCHASE AGREEMENT**

This Securities Purchase Agreement (this "Agreement") is dated as of March 3, 2017, between Amaranthus Bioscience Holdings, Inc., a Nevada corporation (the "Company"), and the purchaser identified on the signature page hereto (including its successors and assigns, the "Purchaser").

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and Rule 506 promulgated thereunder, the Company desires to issue and sell to the Purchaser, and the Purchaser desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and the Purchaser agrees as follows:

**ARTICLE I.  
DEFINITIONS**

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement: (a) capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Certificate of Designation (as defined herein), and (b) the following terms have the meanings set forth in this Section 1.1:

"Acquiring Person" shall have the meaning ascribed to such term in Section 4.5.

"Action" shall have the meaning ascribed to such term in Section 3.1(j).

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

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

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

"Certificate of Designation" means the Certificate of Designation to be filed prior to the Closing by the Company with the Secretary of State of Nevada, in the form of Exhibit A attached hereto.

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“Closing Dates” means the Trading Days on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto in connection with the Closing, and all conditions precedent to (i) the Purchaser’s obligations to pay the Subscription Amount as to the Closing and (ii) the Company’s obligations to deliver the Securities as to the Closing, in each case, have been satisfied or waived.

“Closing” means the closing of the purchase and sale of the Securities pursuant to Section 2.1.

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

“Common Stock” means the common stock of the Company, par value \$0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

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

“Company Counsel” means Sheppard, Mullin, Richter & Hampton LLP, with offices located at 30 Rockefeller Plaza, New York NY 10112.

“Disclosure Schedules” shall have the meaning ascribed to such term in Section 3.1.

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(r).

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

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“FDA” shall have the meaning ascribed to such term in Section 3.1(hh).

“FDCA” shall have the meaning ascribed to such term in Section 3.1(hh).

“GAAP” shall have the meaning ascribed to such term in Section 3.1(h).

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(o).

“Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Material Permits” shall have the meaning ascribed to such term in Section 3.1(m).

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

“Pharmaceutical Product” shall have the meaning ascribed to such term in Section 3.1(hh).

“Preferred Stock” means up to 250,000 shares of the Company’s Series F Preferred Stock issued hereunder having the rights, preferences and privileges set forth in the Certificate of Designation, in the form of Exhibit A hereto.

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Purchaser Party” shall have the meaning ascribed to such term in Section 4.10.

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(e).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(h).

“Securities” means the Preferred Stock.

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

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“Stated Value” means \$0.10 per share of Preferred Stock.

“Subscription Amount” shall mean the aggregate amount to be paid for the Preferred Stock purchased hereunder as specified on the signature page under the heading “Subscription Amount,” in United States dollars and in immediately available funds.

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

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

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

“Transaction Documents” means this Agreement, the Certificate of Designation, the Transfer Agent Instruction Letter, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Company, with a mailing address of 18 Lafayette Place, Woodmere, New York 11598 and a facsimile number of (646) 536-3179, and any successor transfer agent of the Company.

**ARTICLE II.  
PURCHASE AND SALE**

2 . 1 Closing. Upon the terms and subject to the conditions set forth herein, substantially concurrent with the execution and delivery of this Agreement by the parties hereto, the Company agrees to sell, and the Purchaser agrees to purchase, 250,000 shares of Preferred Stock. The Purchaser shall deliver to the Company, via wire transfer or a certified check, immediately available funds equal to the Purchaser’s Subscription Amount as set forth on the signature page hereto executed by the Purchaser, and the Company shall deliver to the Purchaser such number of shares of the Preferred Stock purchased and the Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, the Closing shall occur at the offices of Company Counsel or such other location as the parties shall mutually agree.

2.2 Deliveries.

(a) On or prior to each Closing Date (or as otherwise indicated below), the Company shall deliver or cause to be delivered to the Purchaser the following:

(i) At the first Closing, this Agreement duly executed by the Company;

(ii) the Transfer Agent Instruction Letter, duly executed by the Company and the Transfer Agent; and

(iii) a certificate evidencing a number of shares of Preferred Stock equal to the Purchaser's Subscription Amount divided by \$.10, registered in the name of the Purchaser and evidence of the filing and acceptance of the Certificate of Designation from the Secretary of State of Nevada.

(b) On or prior to each Closing Date, the Purchaser shall deliver or cause to be delivered to the Company, as applicable, the following:

(i) At the first Closing, this Agreement duly executed by the Purchaser; and

(ii) the Purchaser's Subscription Amount by wire transfer to the account specified in writing by the Company

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects on the applicable Closing Date of the representations and warranties of the Purchaser contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of the Purchaser required to be performed at or prior to the applicable Closing Date shall have been performed; and

(iii) the delivery by the Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The obligations of the Purchaser hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects when made and on the applicable Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the applicable Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(v) from the date hereof to the applicable Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market and, at any time prior to the applicable Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of the Purchaser, makes it impracticable or inadvisable to purchase the Securities at the Closing.

### **ARTICLE III. REPRESENTATIONS AND WARRANTIES**

3 . 1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to the Purchaser:

( a ) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary, which are subject to Liens resulting from the publicly disclosed Senior Secured Convertible Debentures held by GEMG, Delafield Investments, Dominion Capital and Anson Investments, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

( b ) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

( c ) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

( d ) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not: (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.4 of this Agreement, (ii) the notice and/or application(s) to each applicable Trading Market for the issuance and sale of the Securities, and (iii) the filing of Form D with the Commission and such filings as are required to be made under applicable state securities laws (collectively, the "Required Approvals").

(f) Issuance of the Securities. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents.

(g) Capitalization. The capitalization of the Company is as set forth on Schedule 3.1(g), which Schedule 3.1(g) shall also include the number of shares of Common Stock owned beneficially, and of record, by Affiliates of the Company as of the date hereof. Except as set forth on Schedule 3.1(g), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as set forth on Schedule 3.1(g) and except as a result of the purchase and sale of the Securities, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. The issuance and sale of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any Person and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

( h ) SEC Reports: Financial Statements. Except for the June 30, 2016 and September 30, 2016 Forms 10-Q, the Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has ceased to be an issuer subject to Rule 144(i) under the Securities Act, one year has elapsed from the time the Company has filed current Form 10 information with the SEC and has filed all required annual and quarterly reports in the preceding 12 months period. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes: Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof: (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, except for the termination of the Company's Collaborative Research and Development Agreement with the U.S. Army (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock, except for the repurchase of common stock from certain stockholders that were previously stockholders of Diogenix, Inc. and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3.1(i), no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, properties, operations, assets or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made.

(j) Litigation. Except as may be disclosed in the SEC Reports, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action") which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(1) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), other than the company being materially in default of all of its outstanding securities by virtue of the fact the Company is not current with its SEC filings, nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority, except as set forth on Schedule 3.1(l) or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, other than tax payments related to payroll that are late, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(m) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (“Material Permits”), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(n) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance.

(o) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights as described in the SEC Reports as necessary or required for use in connection with their respective businesses and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). Except as disclosed on Schedule 3.1(o), none of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

( p ) Insurance. Except as set forth on Schedule 3.1(p), the Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage at least equal to the aggregate Subscription Amount. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

( q ) Transactions With Affiliates and Employees. Except as set forth in the SEC Reports, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for: (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

( r ) Sarbanes-Oxley; Internal Accounting Controls. Except as may be disclosed in the SEC Reports, the Company and the Subsidiaries are in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of each Closing Date. Except as disclosed in the SEC Reports, the Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and its Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company and its Subsidiaries.

( s ) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents, other than Dominick and Dickerman. The Purchaser shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(t) Private Placement. Assuming the accuracy of the Purchaser's representations and warranties set forth in Section 3.2, no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Purchaser as contemplated hereby. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Trading Market.

(u) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(v) Registration Rights. No Person has any right to cause the Company to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(w) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, except for the OTCQB, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(x) [RESERVED]

(y) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided the Purchaser or its agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchaser will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchaser regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that the Purchaser does not make and has not made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

( z ) No Integrated Offering. Assuming the accuracy of the Purchaser's representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act which would require the registration of any such securities under the Securities Act, or (ii) any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(aa) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, other than the non-payment of certain local, state and federal payroll taxes for the period January 2016 to the present day for which most taxes have not been paid, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.

(bb) No General Solicitation. Neither the Company nor any person acting on behalf of the Company has offered or sold any of the Securities by any form of general solicitation or general advertising. The Company has offered the Securities for sale only to the Purchaser.

(cc) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA.

(dd) Accountants. The Company's accounting firm is set forth on Schedule 3.1(ee) of the Disclosure Schedules. To the knowledge and belief of the Company, such accounting firm: (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report for the fiscal year ending December 31, 2013.

(ee) Acknowledgment Regarding Purchaser's Purchase of Securities. The Company acknowledges and agrees that the Purchaser is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that the Purchaser is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by the Purchaser or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchaser's purchase of the Securities. The Company further represents to the Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(ff) Acknowledgment Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(f) and 4.15 hereof), it is understood and acknowledged by the Company that: (i) the Purchaser has not been asked by the Company to agree, nor has the Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities for any specified term, (ii) past or future open market or other transactions by the Purchaser, specifically including, without limitation, Short Sales or "derivative" transactions, before or after a closing of this or future private placement transactions, may negatively impact the market price of the Company's publicly-traded securities, (iii) the Purchaser, and counter-parties in "derivative" transactions to which the Purchaser is a party, directly or indirectly, may presently have a "short" position in the Common Stock and (iv) the Purchaser shall not be deemed to have any affiliation with or control over any arm's length counterparty in any "derivative" transaction. The Company further understands and acknowledges that (y) the Purchaser may engage in hedging activities at various times during the period that the Securities are outstanding, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(gg) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Company's placement agent in connection with the placement of the Securities.

(hh) FDA. As to each product subject to the jurisdiction of the U.S. Food and Drug Administration (“FDA”) under the Federal Food, Drug and Cosmetic Act, as amended, and the regulations thereunder (“FDCA”) that is manufactured, packaged, labeled, tested, distributed, sold, and/or marketed by the Company or any of its Subsidiaries (each such product, a “Pharmaceutical Product”), such Pharmaceutical Product is being manufactured, packaged, labeled, tested, distributed, sold and/or marketed by the Company in compliance with all applicable requirements under FDCA and similar laws, rules and regulations relating to registration, investigational use, premarket clearance, licensure, or application approval, good manufacturing practices, good laboratory practices, good clinical practices, product listing, quotas, labeling, advertising, record keeping and filing of reports, except where the failure to be in compliance would not have a Material Adverse Effect. There is no pending, completed or, to the Company's knowledge, threatened, action (including any lawsuit, arbitration, or legal or administrative or regulatory proceeding, charge, complaint, or investigation) against the Company or any of its Subsidiaries, and none of the Company or any of its Subsidiaries has received any notice, warning letter or other communication from the FDA or any other governmental entity, which (i) contests the premarket clearance, licensure, registration, or approval of, the uses of, the distribution of, the manufacturing or packaging of, the testing of, the sale of, or the labeling and promotion of any Pharmaceutical Product, (ii) withdraws its approval of, requests the recall, suspension, or seizure of, or withdraws or orders the withdrawal of advertising or sales promotional materials relating to, any Pharmaceutical Product, (iii) imposes a clinical hold on any clinical investigation by the Company or any of its Subsidiaries, (iv) enjoins production at any facility of the Company or any of its Subsidiaries, (v) enters or proposes to enter into a consent decree of permanent injunction with the Company or any of its Subsidiaries, or (vi) otherwise alleges any violation of any laws, rules or regulations by the Company or any of its Subsidiaries, and which, either individually or in the aggregate, would have a Material Adverse Effect. The properties, business and operations of the Company have been and are being conducted in all material respects in accordance with all applicable laws, rules and regulations of the FDA. The Company has not been informed by the FDA that the FDA will prohibit the marketing, sale, license or use in the United States of any product proposed to be developed, produced or marketed by the Company nor has the FDA expressed any concern as to approving or clearing for marketing any product being developed or proposed to be developed by the Company.

(i i) Stock Option Plans. Each stock option granted by the Company under the Company’s stock option plan was granted (i) in accordance with the terms of the Company’s stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company’s stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(jj) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(kk) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser's request.

(ll) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(mm) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

3.2 Representations and Warranties of the Purchaser. The Purchaser hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein):

(a) Organization; Authority. The Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by the Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of the Purchaser. Each Transaction Document to which it is a party has been duly executed by the Purchaser, and when delivered by the Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of the Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) Own Account. The Purchaser understands that the Securities are “restricted securities” and have not been registered under the Securities Act or any applicable state securities law and is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting the Purchaser’s right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). The Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(c) Purchaser Status. At the time the Purchaser was offered the Securities, it was, and as of the date hereof it is, either: (i) an “accredited investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act or (ii) a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act.

(d) Experience of the Purchaser. The Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. The Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(e) General Solicitation. The Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement.

The Company acknowledges and agrees that the representations contained in Section 3.2 shall not modify, amend or affect the Purchaser’s right to rely on the Company’s representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transaction contemplated hereby.

**ARTICLE IV.  
OTHER AGREEMENTS OF THE PARTIES**

4.1 Transfer Restrictions.

(a) The Securities may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Securities other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of the Purchaser or in connection with a pledge as contemplated in Section 4.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and shall have the rights and obligations of the Purchaser under this Agreement.

(b) The Purchaser agrees to the imprinting, so long as is required by this Section 4.1, of a legend on any of the Securities in the following form:

THIS SECURITY HAS NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN "ACCREDITED INVESTOR" AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that the Purchaser may from time to time pledge pursuant to a bona fide margin agreement with a registered broker-dealer or grant a security interest in some or all of the Securities to a financial institution that is an "accredited investor" as defined in Rule 501(a) under the Securities Act and who agrees to be bound by the provisions of this Agreement and, if required under the terms of such arrangement, the Purchaser may transfer pledged or secured Securities to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval of the Company and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At the appropriate Purchaser's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities may reasonably request in connection with a pledge or transfer of the Securities, including, if the Securities are registered under a registration statement, the preparation and filing of any required prospectus supplement under Rule 424(b)(3) under the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders thereunder.

4.2 Acknowledgment of Dilution of Voting Power. The Company acknowledges that the issuance of the Securities will result in dilution of the voting power of the outstanding shares of Common Stock, which dilution will be substantial.

4.3 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities or that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4.4 Securities Laws Disclosure; Publicity. The Company shall (a) by 9:30 a.m. (New York City time) on the Trading Day immediately following the date hereof, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchaser that it shall have publicly disclosed all material, non-public information delivered to the Purchaser by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. The Company and the Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor the Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of the Purchaser, or without the prior consent of the Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of the Purchaser, or include the name of the Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of the Purchaser, except: (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchaser with prior notice of such disclosure permitted under this clause (b).

4.5 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that the Purchaser is an “Acquiring Person” under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that the Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchaser.

4.6 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company covenants and agrees that neither it, nor any other Person acting on its behalf, will provide the Purchaser or its agents or counsel with any information that the Company believes constitutes material non-public information, unless prior thereto the Purchaser shall have entered into a written agreement with the Company regarding the confidentiality and use of such information. The Company understands and confirms that the Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.7 Indemnification of Purchaser. Subject to the provisions of this Section 4.7, the Company will indemnify and hold the Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls the Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a “Purchaser Party”) harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys’ fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser Party’s representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or such defense once started is subsequently delayed owing to lack of timely payment by the Company of legal fees and expenses or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company’s prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party’s breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.7 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.8 Certain Transactions and Confidentiality. The Purchaser, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will (i) execute any Short Sales, of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4 or (ii) from the date hereof until the earlier of the 12 month anniversary of the date hereof and the date that the Preferred Stock is no longer outstanding, execute any Short Sales of the Common Stock (a "Prohibited Short Sale"). The Purchaser covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.4, the Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Transaction Documents and the Disclosure Schedules. Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) the Purchaser does not make any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4, (ii) except for a Prohibited Short Sale, the Purchaser shall not be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.4 and (iii) the Purchaser shall have no duty of confidentiality to the Company or its Subsidiaries after the issuance of the initial press release as described in Section 4.4.

4.9 Form D; Blue Sky Filings. The Company agrees to timely file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof, promptly upon request of the Purchaser. The Company shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Securities for, sale to the Purchaser under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of the Purchaser.

**ARTICLE V.  
MISCELLANEOUS**

5 . 1 Termination. This Agreement may be terminated by the Purchaser, as to the Purchaser's obligations hereunder, if the Closing has not been consummated within five (5) days of the date hereof; provided, however, that such termination will not affect the right of any party to sue for any breach by any other party (or parties).

5 . 2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchaser.

5 . 3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2<sup>nd</sup>) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and the holders of at least 67% in interest of the Securities then outstanding or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

5 . 6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Purchaser (other than by merger). The Purchaser may assign any or all of its rights under this Agreement to any Person to whom the Purchaser assigns or transfers any Securities, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the “Purchaser.”

5 . 8 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.7 and this Section 5.8.

5 . 9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party 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 (including with respect to the enforcement of any of the Transaction Documents), 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 improper or is an inconvenient venue for such proceeding. Each party 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 via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement 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 other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.7, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys’ fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

5.10 Survival. The representations and warranties contained herein shall survive each Closing and the delivery of the Securities.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

5.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then the Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, the Purchaser and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to the Purchaser pursuant to any Transaction Document or the Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.18 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.19 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

5.20 **WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.**

*(Signature Pages Follow)*

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

**AMARANTUS BIOSCIENCE HOLDINGS, INC.**

Address for Notice:

655 Montgomery Street, Suite 900  
San Francisco, CA 94111  
Attn: Gerald Commissiong  
Fax: (408) 852-4427

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

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

Sheppard, Mullin, Richter & Hampton LLP  
30 Rockefeller Plaza  
New York, NY 10112  
Attn: Jeffrey Fessler, Esq.  
Fax: (212) 634-3067

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGE TO AMBS SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser: Amaranthus Bioscience PTE. LTD.

*Signature of Authorized Signatory of Purchaser:* \_\_\_\_\_

Name of Authorized Signatory: Chan Hang Fai

Title of Authorized Signatory: Director

Address for Notice to Purchaser:

10 Winstedt Road #02-02, Singapore 227977

Address for Delivery of Securities to Purchaser (if not same as address for notice):

Not Applicable.

Facsimile Number: 011 65 6333 9164

Subscription Amount: \$25,000

Shares of Preferred Stock: 250,000

**Exhibit A**

Certificate of Designations

**Amarantus Enters into a Letter of Intent to Acquire Certain Biotechnology Assets from SeD BioMedical Inc.**

SINGAPORE and SAN FRANCISCO, February 27, 2017 /PRNewswire/ --

- Amarantus evaluating four SeD BioMedical assets for potential acquisition into its portfolio of biotechnology assets
- LOI contemplates capital infusion into Amarantus to assist in restructuring and long term growth plan for building shareholder value
- Amarantus names four new appointees to its Board of Directors and names Ronald Wei interim-CFO of Amarantus

SeD Biomedical Inc. (SeD Biomedical), a Singapore-based wholly owned subsidiary of Singapore eDevelopment Limited (40V.SI), focusing in the area of biomedical product development, and Amarantus BioScience Holdings, Inc. (AMBS), a US-headquartered biotechnology company focused on developing products for Regenerative Medicine, Neurology and Orphan Diseases, today announced that both companies have entered into a non-binding Letter of Intent ("LOI") for Amarantus to acquire as many as four of SeD Biomedical's biotechnology platforms. SeD Biomedical and its Singapore-based holding company, SeD, are under the control of current SeD CEO and largest shareholder Mr. Chan Heng Fai. The LOI comes as part of the Amarantus' overall restructuring plan initiated in November, 2016. Dominick & Dickerman, a New York-based investment banking and advisory firm founded in 1870, is serving as financial advisor to Amarantus for the restructuring and potential asset acquisitions.

**INTRODUCTION**

On February, 27, 2016, the Board of Directors of Singapore eDevelopment Limited ("SeD") announced that its subsidiary, namely, SeD BioMedical Inc. ("SeD Biomed"), has entered into a non-binding letter of intent ("LOI") with Amarantus BioScience Holdings, Inc. ("Amarantus") (AMBS) in relation to:

- (1) a bridge financing for Amarantus (the "Bridge Financing"); and
- (2) an asset investment into Amarantus (the "Asset Investment").

The LOI is intended to be a basis for further negotiations and does not constitute any legally binding obligations.

**PRINCIPAL TERMS IN RELATION TO THE BRIDGE FINANCING**

Prior to the Asset Investment, SeD Biomed will make available funding to help Amarantus pay down key expenses, and initiate the process of settling Amarantus' outstanding secured debt and convertible preferred equity securities, in addition to Amarantus' accounts payable. The use of funds will be mutually agreed between Amarantus and SeD Biomed.

## PRINCIPAL TERMS IN RELATION TO THE ASSET INVESTMENT

The terms of the LOI, as described below, set out the key understanding between SeD Biomed and Amaranthus in relation to the Asset Investment, which is subject to the execution of definitive agreement(s) for the Asset Investment.

**Target Assets.** SeD Biomed proposes to invest in one or more of the following biomedical assets described below and thereafter invest such biomedical assets into Amaranthus.

### Asset Name Description

1. Flavonoid Compound Composition for treating neurological disorders such as Alzheimer's Disease (Medical Food)
2. Chlorinated Myrectin Shuts down kinases linked to cancer
3. Praesidium Natural mosquito repellent
4. Path-way Anti-Pathogenic Solution Broad spectrum antimicrobial compound

SeD Biomed currently has not acquired any of the abovementioned biomedical assets, the acquisition of which is still subject to negotiation, appropriate due diligence and the signing of definitive agreement(s).

**Valuation of the Target Assets.** Each of the Target Assets shall be subject to valuation by an independent expert valuation firm, mutually determined by SeD Biomed and Amaranthus. The costs for the independent expert valuation shall be borne solely by Amaranthus.

**Consideration.** The consideration, principally by way of shares, shall be paid by Amaranthus to SeD Biomed in such manner as to be mutually agreed and determined based on the independent expert valuation.

**Board Seats and Management.** SeD Biomed shall be entitled to appoint four (4) directors to the board of directors of Amaranthus, and in addition is entitled to appoint an additional two directors (2) following the first tranche of the Bridge Financing. In addition, SeD Biomed shall be entitled to appoint an interim-CFO.

**Termination.** Each party shall have the right to terminate the LOI by written notice to the other party within fourteen (14) business days, in the event of a dissolution, filing of bankruptcy proceedings, filing of application for the appointment of a receiver, making of a general assignment for the benefit of creditors, and insolvency, in each case on the part of the other party.

Stand Still Period. Unless the LOI is terminated, Amarantus agrees that for a period commencing from the date of execution of the LOI up to and including the last Closing Date (as defined below), SeD Biomed shall have the exclusive first right to invest assets and/or funds into Amarantus, provided that SeD Biomed shall give approval to Amarantus to accept from other third parties, assets and/or funds required by Amarantus in excess of US\$250,000, subject to fifteen (15) days' prior notice. SeD Biomed and Amarantus may extend the Stand Still Period by mutual agreement.

Closing Date. The Closing Date for each Target Asset investment into Amarantus shall be determined as three (3) business days following the fulfilment of the respective Conditions Precedent (as defined below) in respect of each Target Asset with the first Closing Date being on or before 30 June 2017 and the last Closing Date being 1 February 2018.

Conditions Precedent. (1) Release of all current liens held by secured debt holders of Amarantus; and (2) Completion of Bridge Financing.

#### FOUR (4) SeD BIOMED APPOINTEES TO THE AMARANTUS BOARD OF DIRECTORS

Mr. Rongguo (Ronald) Wei, CPA, CFO at SeD Development Management, LLC

Interim-CFO of Amarantus and Board of Directors

Mr. Wei is a finance professional with more than 15 years working experiences in several multinational and private corporations in both US and China. As the Chief Financial Officer of SeD Development Management, Mr. Wei is responsible for oversight of all finance, accounting, reporting, and taxation activities. He worked for several different US multinational and private companies and developed his career from entry level finance & accounting position to the senior management step by step. Before Mr. Wei came to US, he worked as an equity analyst in Hongyuan Security, in Beijing, China, concentrating on industrial and public company research and analysis. Mr. Wei is an active Certified Public Accountant and received MBA from University of Maryland and Master of Business Taxation from University of Minnesota. Mr. Wei also holds a Master Business degree from Tsinghua University and Bachelor degree from Beihang University.

Steven Spence, Managing Director at Dominick & Dickerman

Board of Directors

Steven Spence has over 30 years of experience in capital markets, business development and as a corporate advisor. Mr. Spence joined Dominick & Dickerman in 2014. After 3 years brokering swaps and FRAs at Eurobrokers International Ltd., Mr. Spence began a 17-year career at Merrill Lynch where he created, developed and managed various listed derivative operations for Merrill Lynch in the United States, Switzerland, France and throughout Asia. He returned to New York to run Global Listed Derivatives and subsequently to London where he served as COO of Merrill Lynch Security Services International. After leaving Merrill Lynch in 2003, Mr. Spence was an independent business consultant to public and private companies, serving as COO, independent Director and advisor to various companies and financial institutions. Mr. Spence is a graduate of Columbia University. Mr. Spence currently holds the series 7, 79, 24 and 66 FINRA Licenses.

Robert Trapp, GM at SeD Development LLC Management

## Board of Directors

Mr. Trapp has over 30 years of cross-cultural business experience with both public and privately owned companies in Asia, USA and Canada from a diversity of industries - hospitality & tourism, finance, real estate, mining, software and consumer goods. His expertise is in the areas of operational management, administration, financial management, marketing, and regulatory compliance. Mr. Trapp held senior-level positions, these roles included; CEO, GM, CFO, Managing Director and participated on several boards. Mr. Trapp served as Senior Vice President with Inter-American Management LLC, a property management company and currently General Manager of SeD Home Inc. and CEO of BMI Capital International. Mr. Trapp has experienced restructuring and a market capitalization of various types of companies. Mr. Trapp held securities licenses that included 24, 27, 7, 63, and 79. He holds a Bachelor of Commerce degree from the University of Calgary and Bachelor of Applied Arts in Hospitality & Tourism Management from Ryerson Polytechnical Institute in Toronto, Ontario.

Conn Flanigan, General Counsel at Global Medical REIT

## Board of Directors

Mr. Flanigan has served as Secretary and General Counsel of Global Medical Reit since December 2013. Mr. Flanigan is also the Secretary and General Counsel of Singapore eDevelopment., Mr. Flanigan has served as General Counsel and Secretary and as a director of American Housing REIT Inc. (f/k/a On Target360 Group, Inc.). Additionally, Mr. Flanigan has served as General Counsel with eBanker Corporate Services, Inc., a Colorado subsidiary of ZH International Holdings Limited, since 2007. Mr. Flanigan received a B.A. in International Relations from the University of San Diego in 1990 and a Juris Doctor Degree from the University of Denver Sturm College of Law in 1996.

## INTERESTS OF SeD DIRECTORS AND SUBSTANTIAL SHAREHOLDERS

Mr Chan Heng Fai is an Executive Director and the Chief Executive Officer of SeD and is also a controlling shareholder of the SeD. In addition, Mr Chan Heng Fai is a director and the sole shareholder of a controlling shareholder of the SeD, namely, Hengfai Business Development Pte. Ltd. ("HBD"). Mr Chan Heng Fai is therefore deemed interested in the shares of SeD held by HBD. Mr Chan Tung Moe, an Executive Director of SeD, is the son of Mr. Chan Heng Fai.

In 2016, Amaranthus disposed of its wholly-owned diagnostics subsidiary, namely, Amaranthus

Diagnostics, Inc., to Avant Diagnostics, Inc. ("Avant") (AVDX). Avant, in turn, paid an aggregate consideration of 80,000,000 shares of its common stock and a US\$50,000 convertible promissory note for the acquisition.

Avant is a diagnostic company which focuses on the commercialization of a series of proprietary microarray-based diagnostic tests that provide early detection of cancer, neurodegenerative diseases, and other chronic and severe disease states. Avant's product, namely, OvaDx, is a non-invasive proteomics diagnostic screening test for the early detection of ovarian cancer. Avant was founded in 2009 and is headquartered in Scottsdale, Arizona.

Mr. Chan Heng Fai has disclosed that he is a director and the sole shareholder of Xpress Group International Limited. Xpress Group International Limited and Dominick Membership LLC (the "Amarantus Investors"), who are institutional investors, were issued 12% senior secured convertible notes ("Secured Note") in principal amount of US\$175,000 and US\$75,000 respectively by Amarantus on 1 November 2016 pursuant to a securities purchase agreement dated 25 October 2016. The Secured Note matures on 1 November 2017 (the "Maturity Date") and shall accrue interest at a rate equal to 12% per annum. It is convertible at any time into either shares in Amarantus at a fixed conversion price of US\$0.0125 per share or shares in Avant owned by Amarantus at a conversion price of US\$0.16 per Avant share. If the market price of Avant shares based on an average closing trading price of Avant shares for the five (5) trading days immediately prior to the conversion date (the "Conversion Market Price") is less than US\$0.32, then the Amarantus Investors shall receive additional Avant shares such that the total additional amount of Avant shares received by the Amarantus Investors as of the conversion date, when valued at the Conversion Market Price, will equal the principal amount of the Secured Note (plus all accrued and unpaid interest) up to a maximum of 5.5 million Avant shares. On the Maturity Date, all outstanding principal and accrued and unpaid interests shall be converted into shares in Amarantus or Avant. For further information, please refer to Amarantus' Current Report on Form 8-K dated 1 November 2016, which is available at <http://www.Amarantus.com>.

Except as disclosed above, none of the directors and/or substantial shareholders of the SeD or persons connected to the directors or substantial shareholders of SeD has any interest, whether direct or indirect, in the Asset Investment except for their respective shareholdings in SeD.

#### CONVERTIBLE PROMISSORY NOTE IN AMARANTUS

SeD's wholly-owned Hong Kong subsidiary, namely, BMI Capital Partners International Limited

("BMI") has partnered with a licensed U.S. investment banking and advisory firm, namely, Dominick & Dickerman LLC to offer debt restructuring and capital raising services ("Restructuring Services") to Amarantus.

In consideration for Restructuring Services provided by BMI, Amarantus has issued a 0% convertible promissory note with an aggregate value of US\$500,000 (the "Convertible Note"). The Convertible Note may be converted into shares in Amarantus at a conversion price of US\$0.025 per share on or within 12 months from the date of issuance i.e. 18 October 2016 subject to five (5) days prior written notice to Amarantus. If the Convertible Note is not converted into shares in Amarantus on or before 17 October 2017, the Convertible Note shall be converted into shares in Amarantus on 18 October 2017 at a conversion price of US\$0.025 per share.

## About Amaranthus BioScience Holdings, Inc.

Amaranthus BioScience Holdings (AMBS) is a biotechnology company developing treatments and diagnostics for diseases in the areas of neurology, regenerative medicine and orphan diseases. AMBS acquired the rights to the Engineered Skin Substitute program (ESS), a regenerative medicine-based approach for treating severe burns with full-thickness autologous skin grown in tissue culture. AMBS has development rights to eltoprazine, a Phase 2b-ready small molecule indicated for Parkinson's disease levodopa-induced dyskinesia, adult ADHD and Alzheimer's aggression, and owns the intellectual property rights to a therapeutic protein known as mesencephalic astrocyte-derived neurotrophic factor (MANF) and is developing MANF-based products as treatments for brain and ophthalmic disorders. MANF was discovered from Amaranthus' proprietary discovery engine PhenoGuard. AMBS also received 80 million shares of Avant Diagnostics, Inc. via the sale of its wholly-owned subsidiary Amaranthus Diagnostics, Inc.

For further information please visit <http://www.Amaranthus.com>, or connect with the Amaranthus on [Facebook](#), [LinkedIn](#), [Twitter](#) and [Google+](#).

## Forward-Looking Statements

Certain statements, other than purely historical information, including estimates, projections, statements relating to our business plans, objectives, and expected operating results, and the assumptions upon which those statements are based, are forward-looking statements. These forward-looking statements generally are identified by the words "believes," "project," "expects," "anticipates," "estimates," "intends," "strategy," "plan," "may," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. Our ability to predict results or the actual effect of future plans or strategies is inherently uncertain. Factors which could have a material adverse effect on our operations and future prospects on a consolidated basis include, but are not limited to: changes in economic conditions, legislative/regulatory changes, availability of capital, interest rates, competition, and generally accepted accounting principles. These risks and uncertainties should also be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements.

## Amaranthus Investor and Media Contact:

Ascendant Partners, LLC  
Fred Sommer  
+1-732-410-9810  
[fred@ascendantpartnersllc.com](mailto:fred@ascendantpartnersllc.com)

## SeD Biomedical Contact:

The contact person for SeD is Mrs. Joan Ling-Lau, SVP, Head of Corporate Finance, Hong Leong Finance Limited, at 16 Raffles Quay, #40-01A Hong Leong Building, Singapore 048581, telephone: +65-6415-9885.