

APPLIED DNA SCIENCES INC  
Form 424B3  
April 07, 2015

**Filed Pursuant to Rule 424(b)(3)**

**File No. 333-199121**

**PROSPECTUS SUPPLEMENT NO. 4 DATED APRIL 7, 2015**

**(TO PROSPECTUS DATED NOVEMBER 18, 2014) AS SUPPLEMENTED BY**

**PROSPECTUS SUPPLEMENT NO. 1 DATED DECEMBER 17, 2014, PROSPECTUS**

**SUPPLEMENT NO. 2 DATED FEBRUARY 11, 2015, AND PROSPECTUS SUPPLEMENT NO. 3**

**DATED MARCH 10, 2015**

**APPLIED DNA SCIENCES, INC.**

**PROSPECTUS**

**\$9,100,000 OF SHARES OF COMMON STOCK AND**

**WARRANTS TO PURCHASE SHARES OF COMMON STOCK**

This Prospectus Supplement No. 4 updates and supplements the prospectus of Applied DNA Sciences, Inc. (“the Company”, “we”, “us”, or “our”) dated November 18, 2014, as updated and supplemented by Prospectus Supplement No. 1 dated December 17, 2014, Prospectus Supplement No. 2 dated February 11, 2015 and Prospectus Supplement No. 3 dated March 10, 2015 (collectively, the “Prospectus”), with the following attached documents which we filed with the Securities and Exchange Commission:

- A. Our Current Report on Form 8-K dated March 25, 2015 filed with the Securities and Exchange Commission on March 27, 2015
- B. Our Current Report on Form 8-K dated April 1, 2015 filed with the Securities and Exchange Commission on April 1, 2015

This Prospectus Supplement No. 4 should be read in conjunction with the Prospectus, which is required to be delivered with this Prospectus Supplement. This prospectus supplement updates, amends and supplements the information included in the Prospectus. If there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any amendments or supplements to it.

**The purchase of the securities offered through the Prospectus involves a high degree of risk. Before making any investment in our common stock and/or warrants, you should carefully consider the risk factors section beginning on page 8 of the Prospectus and the “Risk Factors” section in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on December 15, 2014, as amended on Form 10-K/A on March 6, 2015.**

**You should rely only on the information contained in the Prospectus, as supplemented or amended by this Prospectus Supplement No. 4 and any other prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the Prospectus and this Prospectus Supplement. Any representation to the contrary is a criminal offense.**

The date of this Prospectus Supplement No. 4 is April 7, 2015

**INDEX TO FILINGS**

The Company's Current Report on Form 8-K dated March 25, 2015 filed with the Securities and Exchange Commission on March 27, 2015	<b>Annex</b> A
The Company's Current Report on Form 8-K dated April 1, 2015 filed with the Securities and Exchange Commission on April 1, 2015	B

**Annex A**

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): March 25, 2015

Applied DNA Sciences, Inc.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation)

001-36745  
(Commission File Number)

59-2262718  
(IRS Employer  
Identification No.)

50 Health Sciences Drive

Stony Brook, New York 11790  
(Address of principal executive offices; zip code)

Registrant's telephone number, including area code:  
631-240-8800

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

Underwriting Agreement.

On March 27, 2015, we entered into an underwriting agreement with Maxim Group LLC, as the sole book running manager and sole representative of the underwriters, with respect to the issuance and sale of an aggregate of 3,820,000 shares of common stock, par value \$0.001 per share, together with warrants to purchase an aggregate of 1,528,000 shares of common stock at an exercise price equal to \$3.50 per share in an underwritten public offering. The public offering price for each share of common stock together with 0.40 of a warrant was \$3.00. Pursuant to the underwriting agreement, we also granted Maxim Group LLC a 45-day option to purchase an additional 573,000 shares of common stock and/or warrants to purchase an additional 229,200 shares of common stock to cover any over-allotments made by the underwriters in the sale and distribution of the shares and warrants. The Company expects net proceeds, after deducting underwriter discounts and commissions and other offering expenses, to be approximately \$10.49 million, or approximately \$12.09 million if the underwriters exercise in full their overallotment option.

The shares of common stock and the warrants are being offered and sold to the public pursuant to the Company's registration statement on Form S-3, (File No. 333-202432) and an accompanying base prospectus, which was declared effective with the U.S. Securities and Exchange Commission on March 10, 2015, and a final prospectus supplement filed with the SEC on March 27, 2015.

Pursuant to the underwriting agreement, we agreed to pay the underwriters Maxim Group LLC and The Benchmark Company a cash fee equal to 7% of the aggregate gross proceeds raised in this offering, except that such cash fee shall be 3.5% for up to \$2,000,000 of gross proceeds attributable to investors which may be introduced to the underwriters by us, if any. We also agreed to issue to the underwriters, or their respective designees, warrants, or the Representative's Warrants, to purchase up to a total of 175,720 shares of common stock (4% of the shares of common stock sold including the over allotment option, or 2% of up to \$2,000,000 of shares which may be sold to investors introduced to the underwriters by us, if any) at an initial exercise price of \$3.4385 per share of common stock. The Representative's Warrants have a term of five years, provide for cashless exercise, two demand registration rights with respect to the underlying shares (one at our expense) for a period of five years, and unlimited "piggyback" registration rights with respect to the underlying shares during the five year period commencing six months after the effective date of the offering. Pursuant to customary FINRA rules, the Representative's Warrants are subject to a 180-day lock-up pursuant to which the representative will not sell, transfer, assign, pledge, or hypothecate these warrants or the securities underlying these warrants, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the warrants or the underlying securities for a period of 180 days from March 27, 2015. We have also agreed to pay Maxim Group LLC a non-accountable expense allowance relating to the offering, including without limitation the reasonable fees, disbursements and other charges of the underwriters' counsel, up to \$90,000.

The underwriting agreement contains customary representations, warranties and agreements by us, customary conditions to closing, indemnification obligations of us and Maxim Group LLC, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the underwriting agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties, including being qualified by confidential disclosures exchanged between the parties in connection with the execution of the underwriting agreement. The offering is expected to close on or about April 1, 2015.

Pursuant to the underwriting agreement, subject to certain exceptions, we have agreed not to offer, sell or otherwise dispose of any of our common stock for a period ending 90 days after the closing date without first obtaining the written consent of Maxim Group LLC, as representative of the underwriters. Subject to certain exceptions, our directors and executive officers have also agreed not to sell or otherwise dispose of any currently held shares of common stock for a period of six months after the date of the final prospectus supplement.

In furtherance of the offering, we will enter into an amendment to the warrant agreement with American Stock Transfer & Trust Company, LLC, (“AST”) pursuant to which AST agrees to act as transfer agent with respect to the warrants issued in the offering for us.

The foregoing descriptions of the underwriting agreement and the Representative’s Warrants are qualified in their entirety by reference to the full text of the underwriting agreement, and the Representative’s Warrants which are attached to this report on Form 8-K as Exhibits 1.1 and 4.1 and incorporated herein by reference in their entirety.

This report does not constitute an offer to sell or the solicitation of an offer to buy, and these securities cannot be sold in any state or jurisdiction in which this offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any state or jurisdiction. Any offer will be made only by means of a prospectus, including a prospectus supplement, forming a part of the effective registration statement.

This report contains forward-looking statements. Forward-looking statements include, but are not limited to, statements that express our intentions, beliefs, expectations, strategies, predictions or any other statements related to our future activities, or future events or conditions. These statements are based on current expectations, estimates and projections about our business based, in part, on assumptions made by management. These statements are not guarantees of future performances and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in the forward-looking statements due to numerous factors, including those risks discussed in our Annual Report on Form 10-K and in other documents that we file from time to time with the SEC. Any forward-looking statements speak only as of the date on which they are made, and we do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date of this report, except as required by law.

A shelf registration statement on Form S-3 relating to the shares of common stock and warrants offered by us was filed with the U.S. Securities and Exchange Commission and is effective. The final prospectus supplement relating to the offering has been filed with the SEC and is available on the SEC’s web site at <http://www.sec.gov>. Copies of the final prospectus supplement may be obtained from Maxim Group LLC, 405 Lexington Avenue, New York, NY 10174, (800) 724-0761.

## Divatex Agreement

On March 25, 2015, we entered into a mutual license agreement with Divatex Home Fashion, Inc., (“Divatex”) a leading supplier of home textiles, to commercialize the first supply chain-DNA-verified cotton product. Divatex will be responsible for marketing and is licensing use of certain trademarks to us while we license our Signature T DNA technology to Divatex to ensure the veracity of the product. The initial term of the license agreement is two (2) years, and we may terminate the license agreement if Divatex does not complete the sale of 45 million pounds of product by the second anniversary of the license agreement. The license agreement is intended to result in revenue sharing by both parties. Divatex is a wholly-owned subsidiary of Himatsingka Seide Ltd., a publicly traded company on the BSE, India.

## Item 9.01. Financial Statements and Exhibits.

### (d) Exhibits

1.1\* Underwriting Agreement entered into by and between Applied DNA Sciences, Inc. and Maxim Group LLC as representative of the underwriters named on Schedule A thereto, dated March 27, 2015.

4.1\* Form of Underwriter’s Warrant.

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\* Filed herewith

SIGNATURE

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

Date: March 27, 2015

APPLIED DNA SCIENCES, INC.

By: /s/ James A. Hayward  
Name: James A. Hayward  
Title: Chief Executive Officer



EXHIBIT INDEX

Exhibit No.	Description
1.1*	Underwriting Agreement entered into by and between Applied DNA Sciences, Inc. and Maxim Group LLC as representative of the underwriters named on Schedule A thereto, dated March 27, 2015.
4.1*	Form of Underwriter's' Warrant.

Exhibit 1.1

3,820,000 Shares of Common Stock and

1,528,000 Warrants to Purchase Shares of Common Stock

APPLIED DNA SCIENCES, INC.

UNDERWRITING AGREEMENT

March 27, 2015

Maxim Group LLC  
405 Lexington Avenue  
New York, NY 10174

Acting severally on behalf of itself  
and as representative of the several Underwriters  
named on Schedule I annexed hereto.

Ladies and Gentlemen:

Applied DNA Sciences, Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions contained herein, (this “Agreement”), to sell to you and the other underwriters named on Schedule I to this Agreement (the “Underwriters”), for whom Maxim Group LLC (“Maxim”) is acting as Representative (the “Representative,” “you” or similar terminology), an aggregate of 3,820,000 shares of the Company’s common stock, \$0.001 par value per share (the “Common Stock” and 1,528,000 warrants (the “Warrants”) with the right to purchase one share of Common Stock at an exercise price of \$3.50 per share (together, “Securities”). The respective numbers of Securities to be purchased by each of the several Underwriters are set forth opposite their names on Schedule I hereto. In addition, the Company proposes to grant to the Underwriters an option to purchase up to an additional 573,000 shares of Common Stock (the “Option Shares”) and/or up to an additional 229,200 Warrants (the “Option Warrants”) from the Company for the purpose of covering over-allotments in connection with the sale of the Securities (collectively, the “Option Securities”). The Securities and the Option Securities are collectively referred to herein as the context requires as the “Transaction Securities.”

The Company has prepared and filed in conformity with the requirements of the Securities Act of 1933, as amended (the “Securities Act”), and the published rules and regulations thereunder (the “Rules”) adopted by the Securities and Exchange Commission (the “Commission”), a Registration Statement on Form S-3 (No. 333-202432), including the related base prospectus and all exhibits, financial schedules and all documents and information deemed to be a part thereof (the “Registration Statement”), covering the registration of certain classes of securities of the Company (including the Common Stock and Warrants) under the Securities Act for offer and sale from time to time in accordance with Rule 415 of the Rules. The Registration Statement was declared effective by the Commission on March 10, 2015 (the “Effective Date”). Promptly after execution and delivery of this Agreement, the Company will file a prospectus supplement in accordance with the provisions of Rule 430B and paragraph (b) of Rule 424 of the Securities Act. The term “Rule 430B Information” means any information included in such prospectus supplement that was omitted from the Registration Statement at the time it became effective but that is deemed to be part of and included in the Registration Statement pursuant to Rule 430B. The term “Preliminary Prospectus” means each base prospectus and prospectus supplement used in connection with the offering of the Transaction Securities that omitted Rule 430B Information, including any document incorporated by reference therein at such time. If the Company has filed an abbreviated registration statement to register additional Securities pursuant to Rule 462(b) under the Rules

(the “462(b) Registration Statement”), then any reference herein to the Registration Statement shall also be deemed to include such 462(b) Registration Statement. The term “Prospectus” as used in this Agreement means the Preliminary Prospectus and the final prospectus supplement that includes Rule 430B Information filed with the Commission pursuant to Rule 424(b), including any document incorporated by reference therein at such time.

The Company understands that the Underwriters propose to make a public offering of Securities (the “Offering”), as set forth in and pursuant to the Prospectus, as soon after the date of this Agreement as the Representative deems advisable. The Company hereby confirms that the Underwriters and dealers have been authorized to distribute or cause to be distributed each Preliminary Prospectus, and each Issuer-Represented Free Writing Prospectus, if any (as hereinafter defined) and are authorized to distribute the Prospectus (as from time to time amended or supplemented if the Company furnishes amendments or supplements thereto to the Underwriters).

1. Sale, Purchase, Delivery and Payment for Securities. On the basis of the representations, warranties and agreements contained in, and subject to the terms and conditions of, this Agreement:

(a) The Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price of \$2.7807 per share of Common Stock and \$0.02325 per Warrant, representing a 7% discounted price from the price the Underwriters shall sell Securities to the public, the number of Securities set forth opposite the name of such Underwriter under the column “Number of Securities to be Purchased” on Schedule I to this Agreement, subject to adjustment in accordance with Section 8 hereof. Notwithstanding the foregoing, the purchase price per share of Common Stock and per Warrant to be paid by the Underwriters to the Company shall be \$2.88535 and \$0.024125, respectively, representing a 3.5% discounted price from the price the Underwriters shall sell Securities to the public, for each Security sold by the Underwriters to an investor first introduced to the Underwriter by the Company for purposes of participating in the Offering (a “Company Investor”); provided that the 3.5% discounted price will only apply to the first \$2,000,000 sold to Company Investors (the “Company Investor Maximum”). All sales to Company Investors in excess of \$2,000,000 will be sold at the 7% discounted price.

(b) The Company hereby grants to the several Underwriters an option to purchase, severally and not jointly, all or any part of the Option Shares at a price per share equal to \$2.7807, and/or all or any part of the Option Warrants at \$0.02325 per warrant. The number of Option Securities to be purchased from time to time by each Underwriter shall in the aggregate together with such prior purchases not exceed the same percentage (adjusted by the Representative to eliminate fractions) of the total number of Option Securities to be purchased by the Underwriters as such Underwriter is purchasing of Securities. Such option may be exercised only to cover over-allotments in the sales of Securities by the Underwriters and may be exercised in whole or in part at any time on or before 12:00 noon, Eastern Standard Time (“EST”), on the business day before Securities Closing Date (as defined below), and from time to time thereafter within 45 days after the date of this Agreement, in each case upon written, facsimile or telegraphic notice, or verbal or telephonic notice confirmed by written or facsimile notice, by the Representative to the Company no later than 12:00 noon, EST, on the business day before Securities Closing Date or at least one business day before the Option Securities Closing Date (as defined below), as the case may be, setting forth the number of Option Shares and Option Warrants to be purchased and the time and date (if other than Securities Closing Date) of such purchase.

(c) Payment of the purchase price for, and delivery of the Securities as provided for in Section 1(d) hereof, shall be made at the offices of Maxim Group LLC, 405 Lexington Avenue, New York, NY 10174 or at such other place as shall be agreed upon by the Representative and the Company, at 10:00 a.m., EST, on the third (or if Securities are priced, as contemplated by Rule 15c6-1(c) under the Securities and Exchange Act of 1934, as amended (the “Exchange Act”), after 4:30 p.m. EST, fourth) business day following the date of this Agreement (such time and date of delivery and payment are called the “Securities Closing Date”). In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price, and delivery of such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representative and the Company, on each date of delivery as specified in the notice from the Representative to the Company (such time and date of delivery and payment are called the “Option Securities Closing Date”). Securities Closing Date and any Option

Securities Closing Date are called, individually, a “Closing Date” and, together, the “Closing Dates.”

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(d) Payment shall be made to the Company by wire transfer of immediately available funds or by certified or official bank check or checks payable in New York Clearing House (same day) funds drawn to the order of the Company against delivery of the securities comprising Securities to the Representative for the respective accounts of the Underwriters of Securities or Option Securities to be purchased by them.

(e) If certificates evidencing the Securities are requested by the Representative for delivery on a Closing Date, such certificates shall be registered in such names and shall be in such denominations as the Representative shall request in writing at least two full business days before Securities Closing Date or, in the case of Option Securities, on the day of notice of exercise of the option as described in Section 1(a). If no certificates are so requested, the Securities or Option Securities shall be delivered on each Closing Date (or the Option Securities Closing Date in the case of Option Securities) by or on behalf of the Company to the Representative through the facilities of the Depository Trust Company ("DTC") for the account of each Underwriter. If certificates are so requested, the Company will cause the certificates representing the Securities or Option Securities to be made available for checking and packaging, at such place as is designated by the Representative, on the full business day before Securities Closing Date (or the Option Securities Closing Date in the case of the Option Securities).

(f) The Company hereby agrees to issue to the Representative (and/or its respective designees) on the Closing Date, Warrants to purchase up to an aggregate of 175,720 shares of Common Stock (the "Representative's Warrants"), which represents the number of shares of Common Stock equal to four percent (4.0%) of the total number of shares of Common Stock, including the Option Shares, sold in the Offering to investors other than Company Investors plus two percent (2%) of the total number of shares of Common Stock, including the Option Shares, sold in the Offering to Company Investors up to the Company Investor Maximum. The Representative's Warrants shall be exercisable, in whole or in part, commencing 180 days from the date hereof and expiring on the five-year anniversary of the date hereof at an initial exercise price of \$3.4385 per share of Common Stock, which is equal to one hundred and fifteen percent (115%) of the initial public offering price of the Common Stock.

2. Representations and Warranties of the Company. The Company represents and warrants to each Underwriter as of the date hereof, as of Securities Closing Date and as of each Option Securities Closing Date (if any), as follows:

(a) The Company meets the requirements for use of Form S-3 for registration under the Securities Act. The Registration Statement (including any Rule 462(b) Registration Statement) has been declared effective by the Commission or become automatically effective under the Securities Act and no stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose has been instituted or is pending or, to the knowledge of the Company, is threatened or contemplated by the Commission or any other governmental entity. No order preventing or suspending the use of any Prospectus has been issued and no proceeding for that purpose has been instituted or is pending or, to the knowledge of the Company, is threatened or contemplated by the Commission or any other governmental entity. The Company has fully complied with any request on the part of the Commission or other governmental entity for additional information.

At the Effective Date, at the date hereof, at the Closing Date and at the Option Securities Closing Date (if any), each of the Registration Statement and any amendment or supplement thereto complied, complies and will comply in all material respects with the requirements of the Securities Act and the Rules, and did not, does not and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. Neither the Prospectus nor any amendment or supplement thereto, at the respective dates of the Prospectus or such amendment or supplement, at the respective times that the Prospectus and any such amendment or supplement were issued, at any of the Closing Dates, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

Each Prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act and the Rules and the Prospectus delivered to the Underwriters for use in connection with this offering was identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

At the Securities Closing Date, each Issuer-Represented Free Writing Prospectus (as defined below) identified on Schedule II hereto and the Prospectus (collectively, the “General Disclosure Package”), did not include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

As used in this Section and elsewhere in this Agreement:

“Issuer-Represented Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 of the Rules (“Rule 433”), relating to the Securities that (i) is required to be filed with the Commission by the Company, (ii) is a “road show that is a written communication” whether or not required to be filed with the Commission, or (iii) is exempt from filing pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g).

Each Issuer-Represented Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities or until any earlier date that the Company notified or notifies the Representative as described in Section 4(a)(iii), does not and will not include any information that conflicted, conflicts or will conflict in any material respect with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein and any other prospectus deemed to be a part thereof that has not been superseded or modified.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement, the Prospectus or any Issuer-Represented Free Writing Prospectus, or the General Disclosure Package or any amendment or supplement thereto made in reliance upon and in conformity with information furnished to the Company in writing by the Representative on behalf of the Underwriters specifically for use in therein; provided that the Company acknowledges that the only information furnished in writing by the Representative on behalf of the Underwriters for use therein consists solely of the disclosure contained in the “Underwriting” section of the Prospectus (the “Underwriter Information”).

(b) The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act and the rules and regulations promulgated thereunder, as applicable, and when read together with the other information in the Registration Statement, the General Disclosure Package or the Prospectus, as the case may be, (a) at the Effective Date, (b) at the earlier of the time the Prospectus was first used and the date and time of the first contract of sale of the Securities, (c) at the Closing Date and (d) and, if any Option Securities are purchased, at the Option Securities Closing Date, did not and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(c) The financial statements of the Company (including all notes and schedules thereto) included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the financial position of such entities and their subsidiaries, if any, at the dates indicated and the statement of operations, stockholders' equity and cash flows of, or such other permitted financial statements for, such entities and their subsidiaries, if any, for the periods specified, and related schedules and notes thereto, and the unaudited financial information filed with the Commission as part of the Registration Statement, have been prepared in conformity with generally accepted accounting principles, consistently applied throughout the periods involved, except in the case of unaudited financials which are subject to normal year-end adjustments and do not contain certain footnotes. Any pro forma financial statements and the related notes thereto included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the information shown therein, have been prepared in all material respects in accordance with the Commission's rules and guidelines with respect to pro forma financial statements and have been properly compiled on the bases described therein, and subject to such rules and guidelines, the Company believes the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the Securities Act or the Rules promulgated thereunder.

(d) Each of RBSM LLP and Marcum LLP (each, an "Auditor") whose respective reports are filed with the Commission as a part of the Registration Statement and Prospectus, are and, during the periods covered by their reports, were, to the knowledge of the Company, independent public accountants as required by the Securities Act, the Rules and the rules and regulations of the Public Accounting Oversight Board.

(e) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(f) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease, and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement and the various other agreements required hereunder and thereunder to which it is a party; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except for such jurisdictions where the failure to so qualify individually or in the aggregate would not have a material adverse effect on the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects (as described in the



Registration Statement, the General Disclosure Package and the Prospectus) of the Company and its subsidiaries considered as a whole (a “Material Adverse Effect”).

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(g) Each subsidiary of the Company has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization, has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify would not have a Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding capital stock or equity interests of each subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any material security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock or equity interests of any subsidiary was issued in violation of the preemptive or similar rights of any securityholder of such subsidiary.

(h) The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus. The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus: other than with respect to (x) any shares reserved pursuant to the Company's equity incentive plan as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, and (y) the Common Stock underlying the warrants described in the Prospectus, (i) no shares of capital stock of the Company are reserved for any purpose, (ii) no outstanding securities are convertible into or exchangeable for any shares of capital stock of the Company, and (iii) there are no outstanding options, rights (preemptive or otherwise) or warrants to purchase or subscribe for shares of capital stock or any other securities of the Company.

(i) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Agreement, the Warrants and the Representative's Warrant and the issuance and sale of the Securities and the Common Stock underlying the Warrants and the Representative's Warrant. This Agreement has been duly authorized, executed and delivered by the Company and the Warrant and Representative's Warrant, upon issuance, will have been duly authorized, executed and delivered by the Company.

(j) When issued, the Representative's Warrants and the Warrants will constitute valid and binding obligations of the Company to issue and sell, upon exercise thereof and payment of the respective exercise prices therefor, the number and type of securities of the Company called for thereby in accordance with the terms thereof and such Representative's Warrants and Warrants are enforceable against the Company in accordance with their respective terms, except: (i) as such enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws relating to or affecting creditors' rights and remedies generally; (ii) as enforceability of any indemnification or contribution provision may be limited under foreign, federal and state securities laws; and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought.

(k) The Securities have been duly authorized for issuance and sale to the Underwriters or their nominees pursuant to this Agreement, and when the Securities have been issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, such securities will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company. The Securities conform in all material respects to all statements relating thereto

contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same; and no holder of the Common Stock will be subject to personal liability by reason of being such a holder. The certificates, if any, to be used to evidence the securities comprising Securities will, at the Closing Date, be in due and proper form and will comply in all material respects with all applicable legal requirements, the requirements of the charter and by-laws of the Company and the requirements of the NASDAQ Capital Market.

(l) The shares of Common Stock underlying the Warrants and the shares of Common Stock underlying the Representative's Warrants have been duly authorized for issuance, conform to the description thereof in the Registration Statement, the General Disclosure Package and in the Prospectus and have been validly reserved for future issuance and will, upon exercise of the Warrants and/or the Representative's Warrants and payment of the exercise price thereof, be duly and validly issued, fully paid and non-assessable and will not be subject to the preemptive or other similar rights of any securityholder of the Company. No holder of the Common Stock received upon exercise of the Warrants or the Representative's Warrants will be subject to personal liability by reason of being such a holder. The certificates, if any, to be used to evidence the Warrants and the Common Stock underlying the Warrants and Representative's Warrant, at the Closing Date, be in due and proper form and will comply in all material respects with all applicable legal requirements, the requirements of the charter and by-laws of the Company and the requirements of the NASDAQ Capital Market.

(m) The Company and each of its subsidiaries, if any, has all requisite corporate power and authority, and all necessary authorizations, approvals, consents, orders, licenses, certificates and permits of and from all governmental or regulatory bodies or any other person or entity (collectively, the "Permits"), to own, lease and license its assets and properties and conduct its business as presently conducted, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not have a Material Adverse Effect. The Company and each of its subsidiaries, if any, have fulfilled and performed in all material respects all of their respective obligations with respect to such Permits and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of such entity thereunder. Except as may be required under the Securities Act, state and foreign Blue Sky laws and the rules of the Financial Industry Regulatory Authority ("FINRA") and the NASDAQ Capital Market, no other Permits are required to enter into, deliver and perform the obligations of the Company under this Agreement, the Warrants or the Representative's Warrant and for the Company to issue and sell the Securities.

(n) The Company and each of its subsidiaries owns or possesses legally enforceable rights to use all patents, patent rights, inventions, trademarks, trademark applications, trade names, service marks, copyrights, copyright applications, licenses, know-how and other similar rights and proprietary knowledge (collectively, "Intangibles") necessary for the conduct of its business. Neither the Company nor any of its subsidiaries has received any notice of, or is not aware of, any infringement of or conflict with asserted rights of others with respect to any Intangibles.

(o) Subsequent to the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus: (i) there has not been any event which would reasonably be expected to result in a Material Adverse Effect; (ii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which would reasonably be expected to materially affect the financial results or financial condition of the Company or any of its subsidiaries. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, since the date of the latest balance sheet included in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has (A) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business, (B) entered into any transaction not in the ordinary course of business or (C) declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

(p) There is no document, contract or other agreement required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed as required by the Securities Act or Rules. Each description of a contract, document or other agreement in the Registration Statement, the General Disclosure Package or the Prospectus accurately reflects in all material respects the terms of the underlying contract, document or other agreement. Each contract, document or other agreement described in the Registration Statement, the General Disclosure Package or the Prospectus or filed as exhibits to the Registration Statement is, or upon consummation of the Offering will be, in full force and effect and is valid and enforceable in all material respects by and against the Company or any of its subsidiaries, as the case may be, in accordance with its terms, except (i) such contracts or other agreements that have terminated or expired in accordance with their terms as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, and (ii) as enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws relating to or affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity and, with respect to equitable relief, the discretion of the court before which any proceeding therefor may be brought (regardless of whether enforcement is sought in a proceeding at law or in equity), and with respect to indemnification thereunder, except as rights may be limited by applicable law or policies underlying such law. To the knowledge of the Company, neither the Company nor any of its subsidiaries is in default in the observance or performance of any term or obligation to be performed by it under any such agreement, and no event has occurred which with notice or lapse of time or both would constitute such a default. No default exists, and no event has occurred which with notice or lapse of time or both would constitute a default, in the due performance and observance of any term, covenant or condition, by the Company or any of its subsidiaries, if a subsidiary is a party thereto, of any other agreement or instrument to which it is a party or by which it or its properties or business may be bound or affected which default or event, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(q) The statistical and market related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate. The Company had a reasonable basis for, and made in good faith, each "forward-looking statement" (within the meaning of Section 27A of the Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus.

(r) Neither the Company nor any of its subsidiaries (i) is in violation of its certificate or articles of incorporation, by-laws, certificate of limited partnership, agreement of limited partnership, certificate of formation, operating agreement or other organizational documents, (ii) is in default under, and no event has occurred which, with notice or lapse of time, or both, would constitute a default under, or result in the creation or imposition of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, upon, any property or assets of the Company or any of its subsidiaries pursuant to, any bond, debenture, note, indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation of any statute, law, rule, regulation, ordinance, directive, judgment, decree or order of any judicial, regulatory or other legal or governmental agency or body, foreign or domestic, except (in the case of clauses (ii) and (iii) above) for violations or defaults that could not (individually or in the aggregate) reasonably be expected to have a Material Adverse Effect.

(s) Neither the execution, delivery and performance of this Agreement, the Warrants, the Representative's Warrant by the Company nor the consummation of any of the transactions contemplated hereby (including, without limitation, the issuance and sale by the Company of the Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or any of its subsidiaries pursuant to the terms of: (i) any indenture, mortgage, deed of trust or other agreement or instrument to which either of the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries or any of their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to either of the Company or any of its subsidiaries, or (ii) violate any provision of certificate or articles of incorporation, by-laws, certificate of limited partnership, agreement of limited partnership, certificate of formation, operating agreement or other organizational documents of either of the Company or any of its subsidiaries, except (A) in the case of clause (i) above, for violations or defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and (B) for such consents or waivers which have already been obtained and are in full force and effect.

(t) Except as otherwise set forth in the Registration Statement, the General Disclosure Package and the Prospectus, no holder of any security of the Company has any right, which has not been waived or satisfied prior to the date hereof, to have any security owned by such holder included in the Registration Statement or to demand registration of any security owned by such holder, except for the warrants dated July 15, 2010 held by Etico Capital, LLC and Pterodactyl Holdings LLC for which the failure to obtain a waiver of such rights could not (individually or in the aggregate) reasonably be expected to have a Material Adverse Effect. Each director and executive officer of the Company and each stockholder of the Company listed on Schedule IV hereto has delivered to the Representative his, her or its enforceable written lock-up agreement in the form attached to this Agreement as Exhibit A hereto ("Lock-Up Agreement").

(u) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there are no legal or governmental proceedings pending to which either of the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject; and, to the knowledge of the Company, no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

(v) Neither the Company nor any of its subsidiaries is involved in any labor dispute or, to the knowledge of the Company, is any such dispute threatened, which dispute would reasonably be expected to result in a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries, principal suppliers or contractors which would reasonably be expected to result in a Material Adverse Effect. The Company is not aware of any threatened or pending litigation between either of the Company or any of its subsidiaries and any of its executive officers and has no reason to believe that such officers will not remain in the employment of the Company or its subsidiaries, as the case may be.

(w) No transaction has occurred between or among either of the Company, its subsidiaries and any of their officers or directors, or five percent stockholders or any affiliate or affiliates of any such officer or director or five percent stockholders that is required to be described in and is not described in the Registration Statement, the General Disclosure Package and the Prospectus.

(x) Neither the Company nor any of its subsidiaries has taken, nor will it take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the Common Stock or any other security of the Company to facilitate the sale or resale of any of Securities.

(y) The Company and its subsidiaries have filed all federal, state, local and foreign tax returns which are required to be filed through the date hereof, which returns are true and correct in all material respects or has received timely extensions thereof, and has paid all taxes shown on such returns and all assessments received by it to the extent that the same are material and have become due. There are no material tax audits or investigations pending; nor are there any material proposed additional tax assessments against either the Company or its subsidiaries.

(z) The Common Stock and the Warrants have been duly authorized for listing on the NASDAQ Capital Market. The Company has filed with the Commission on Forms 8-A (File Number 001-36745) to register under Section 12(b) of the Exchange Act Common Stock and the Warrants. The registration of the Common Stock and Warrants under the Exchange Act has each been declared effective by the Commission. The Common Stock and Warrants have each been registered as a class of securities pursuant to Section 12(b) of the Exchange Act.

(aa) The Company has not taken any action designed to, or likely to have the effect of, terminating the registration of the Common Stock and Warrants under the Exchange Act or the listing of the Common Stock or Warrants on the NASDAQ Capital Market, nor has the Company received any notification that the Commission or the NASDAQ Capital Market is contemplating terminating such registration or listing.

(bb) The books, records and accounts of the Company and its subsidiaries accurately and fairly reflect, in all material respects, the transactions in, and dispositions of, the assets of, and the results of operations of, the Company and its subsidiaries. Except as disclosed in the Registration Statement, General Disclosure Package and Prospectus, the Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances 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 accordance with generally accepted accounting principles 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.

(cc) The Company is not aware of (i) any material weakness or significant deficiency in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in internal controls, except as disclosed in the Registration Statement, General Disclosure Package and Prospectus; or (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company's internal controls.

(dd) Except as described in the General Disclosure Package and the Prospectus and as preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act, the Auditors have not been engaged by the Company to perform any "prohibited activities" (as defined in Section 10A of the Exchange Act).

(ee) Except as described in the General Disclosure Package and the Prospectus, there are no material off-balance sheet arrangements (as defined in Item 303 of Regulation S-K) that have or are reasonably likely to have a material current or future effect on the Company's financial condition, revenues or expenses, changes in financial condition, results of operations, liquidity, capital expenditures or capital resources.





(ff) The Company's Board of Directors has validly established an audit committee whose composition satisfies, and upon completion of the Offering will satisfy, the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules and the Board of Directors and/or the audit committee of the Board of Directors has adopted a charter that satisfies the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules.

(gg) The Company's Board of Directors has validly established a compensation committee whose composition satisfies, and upon completion of the Offering will satisfy, the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules and the Board of Directors and/or the compensation committee of the Board of Directors has adopted a charter that satisfies the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules.

(hh) The Company has taken all necessary actions to ensure that it is in compliance in all material respects with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act") that are then in effect and with which the Company is required to comply. The Company has not, directly or indirectly, including through any subsidiary, extended credit, arranged to extend credit, or renewed any extension of credit, in the form of a personal loan, to or for any executive officer of the Company or any of its subsidiaries, or to or for any family member or affiliate of any director or executive officer of the Company or any of its subsidiaries.

(ii) The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company does not have any reason to believe that it or any of its subsidiaries will not be able (A) to renew, if desired, its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and not at a cost that is materially more significant. Neither the Company nor any of its subsidiaries has been denied any insurance coverage that it has sought or for which it has applied.

(jj) There are no claims, payments, issuances, arrangements or understandings for services in the nature of a finder's, consulting or origination fee with respect to the introduction of the Company to the Underwriters or the sale of Securities hereunder or any other arrangements, agreements, understandings, payments or issuances with respect to the Company that may affect the Underwriters' compensation, as determined by the FINRA.

(kk) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and except for fees paid to Dawson James Securities, Inc. during 2014, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, investing fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who provided capital to the Company, (ii) any FINRA member, or (iii) any person or entity that, to the Company's knowledge, has any direct or indirect affiliation or association with any FINRA member within the 12-month period prior to the date on which the Registration Statement was filed with the Commission ("Filing Date") or thereafter.

(ll) None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or any affiliate or associate of any participating FINRA member, except as specifically authorized herein.

(mm) To the knowledge of the Company, no: (i) officer or director of the Company or its subsidiaries, (ii) owner of 5% or more of the Company's unregistered securities or (iii) owner of any amount of the Company's unregistered securities acquired within the 180-day period prior to the Filing Date, has any direct or indirect affiliation or association with any FINRA member. The Company will advise the Underwriters and their counsel if it becomes

aware that any officer, director or stockholder of the Company or its subsidiaries is or becomes an affiliate or associated person of a FINRA member participating in the Offering.

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(nn) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus: (i) the Company and each of its subsidiaries is in compliance in all material respects with all rules, laws and regulation relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment (“Environmental Law”) which are applicable to its business; (ii) neither the Company nor any of its subsidiaries has received any notice from any governmental authority or third party of an asserted claim under Environmental Laws; (iii) the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and is in compliance in all material respects with all terms and conditions of any such permit, license or approval; (iv) to the knowledge of the Company, no facts currently exist that will require either Company or its subsidiaries to make future material capital expenditures to comply with Environmental Laws; and (v) no property which is or has been owned, leased or occupied by either of the Company or its subsidiaries has been designated as a “Superfund site” pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) (“CERCLA”), or otherwise designated as a contaminated site under applicable state or local law. Neither the Company nor its subsidiaries has been named as a “potentially responsible party” under CERCLA.

(oo) The Company is not and, after giving effect to the Offering, the sale of Securities and the application of proceeds thereof as described in the General Disclosure Package and the Prospectus, will not be an “investment company” within the meaning of the Investment Company Act of 1940, as amended.

(pp) Neither the Company nor any other person associated with it or acting on its behalf including, without limitation, any director, officer, agent or employee of the Company or its subsidiaries, has, directly or indirectly, while acting on behalf of the Company or its subsidiaries: (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any other unlawful payment.

(qq) No payment has been made by the Company or its subsidiaries, or by any person authorized to act on their behalf, to any person in connection with any contracts with any governmental entity or regulatory agency (“Government Contracts”), in violation of applicable procurement laws or regulations. The Company’s and its subsidiaries’ cost accounting and procurement systems with respect to Government Contracts are in compliance in all material respects with all applicable governmental regulations and requirements. With respect to each Government Contract: (i) the Company and each subsidiary have complied with all material terms and conditions of such Government Contract, including all clauses, provisions and requirements incorporated expressly, by reference or by operation of law therein; (ii) the Company and each such subsidiary have complied with all material requirements of applicable laws pertaining to such Government Contract; (iii) all representations and certifications executed, acknowledged or set forth in or pertaining to such Government Contract were complete and correct in all material respects as of their effective date, and the Company and each subsidiary have complied in all material respects with all such representations and certifications; (iv) neither the United States government nor any prime contractor, subcontractor or other person has notified the Company or any subsidiary, either orally or in writing, that the Company or such subsidiary has breached or violated any applicable law, or any material certification, representation, clause, provision or requirement pertaining to such Government Contract; and (v) no termination for convenience, termination for default, cure notice or show cause notice is in effect as of the date hereof pertaining to any Government Contract. Neither the Company nor any of its subsidiaries nor any of their respective directors, officers or employees is (or during the last three (3) years has been) under administrative, civil or criminal investigation, or indictment or audit by any governmental authority with respect to any alleged irregularity, misstatement or omission arising under or relating to any Government Contract (other than routine Defense Contract Audit Agency audits, in

which no such irregularities, misstatements or omissions were identified). During the last three (3) years, neither the Company nor any of its subsidiaries has conducted or initiated any internal investigation or made a voluntary disclosure to the United States government, with respect to any alleged irregularity, misstatement or omission arising under or relating to any Government Contract. There are no outstanding claims against the Company or any subsidiary, either by the United States government or by any prime contractor, subcontractor, vendor or other third party, arising under or relating to any Government Contract. There are no disputes between the Company or any subsidiary and the United States government under the Contract Disputes Act or any other statute or between the Company or any subsidiary and any prime contractor, subcontractor or vendor arising under or relating to any Government Contract. Neither the Company nor any subsidiary nor, to the Company's knowledge, any of its or the subsidiary's directors, officers or employees is (or during the last three (3) years has been) suspended or debarred from doing business with the United States government or is (or during such period was) the subject of a finding of non-responsibility or ineligibility for United States government contracting. There is no suit or investigation pending and, to the Company's knowledge, no suit or investigation threatened against the Company or any subsidiary with respect to any Government Contract.

(rr) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (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 and its subsidiaries with respect to the Money Laundering Laws is pending, or to the knowledge of the Company, threatened.

(ss) Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“OFAC”); and the Company will not directly or indirectly use the proceeds of the Offering, or lend, contribute or otherwise make available such proceeds to its subsidiaries or any joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(tt) Neither the Company nor any of its directors or officers or, to the best knowledge of the Company, any agent, employee, affiliate or other person acting on behalf of the Company has engaged in any activities sanctionable under the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010, the Iran Sanctions Act of 1996, the National Defense Authorization Act for Fiscal Year 2012, the Iran Threat Reduction and Syria Human Rights Act of 2012 or any Executive Order relating to any of the foregoing (collectively, and as each may be amended from time to time, the “Iran Sanctions”); and the Company will not directly or indirectly use the proceeds of the Offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of engaging in any activities sanctionable under the Iran Sanctions.

(uu) Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not sold or issued any shares of Common Stock during the six-month period preceding the date of the Prospectus, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock options plans or other employee compensation plans or pursuant to outstanding options, rights or warrants. Neither the Company nor any of its affiliates (as such term is defined under Rule 144 of the Securities Act) has, prior to the date hereof, made any offer or sales of any securities which are required to be “integrated” pursuant to the Securities Act or the Rules with the offer and sale of the Securities pursuant to the Registration Statement.

(vv) The Company fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the U.S. Employee Retirement Income Security Act of 1974 (“ERISA”) and the regulations and published interpretations thereunder with respect to each “plan” as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its employees are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No “Reportable Event” (as defined in 12 ERISA) has occurred with respect to any “Pension Plan” (as defined in ERISA) for which the Company could have any liability. The execution of this Agreement, the Warrants, the Representative’s Warrants or consummation of the Offering does not constitute a triggering event under any plan or any other employment contract, whether or not legally enforceable, which (either alone or upon the occurrence of any additional or subsequent event) will or may result in any payment (of severance pay or otherwise), acceleration, increase in vesting, or increase in benefits to any current or former participant, employee or director of the Company or any of its subsidiaries.

(ww) The statements in the Registration Statement, the General Disclosure Package and the Prospectus under the headings “Description of Securities,” “Indemnification For Securities Act Liabilities,” “Executive Compensation” and “Certain Relationships and Related Transactions, and Director Independence” insofar as such statements summarize legal matters, agreements, documents or proceedings discussed therein, are accurate and fair summaries of such legal matters, agreements, documents or proceedings in all material respects.

(xx) All information contained in the questionnaires completed by each of the Company’s officers and directors and provided to the Representative as well as the biographies of such individuals in the Registration Statement is true and correct in all material respects and the Company has not become aware of any information that would cause the information disclosed in the questionnaires completed by the directors and officers to become inaccurate and incorrect.

(yy) The Company and its subsidiaries own or lease all such properties as are necessary to the conduct of its business as presently operated and as proposed to be operated as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company and its subsidiaries have good and marketable title to all personal property owned by them, free and clear of all liens except such as are described in the Registration Statement, the General Disclosure Package and the Prospectus or such as do not (individually or in the aggregate) materially affect the business or prospects of the Company or its subsidiaries. Any real property and buildings held under lease or sublease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material to, and do not interfere with, the use made and proposed to be made of such property and buildings by the Company and its subsidiaries. Neither the Company nor any of its subsidiaries has received any notice of any claim adverse to its ownership of any real or personal property or of any claim against the continued possession of any real property, whether owned or held under lease or sublease by the Company or its subsidiaries.

(zz) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there is no judicial, regulatory, arbitral or other legal or governmental proceeding or other litigation or arbitration, domestic or foreign, pending to which the Company or any of its subsidiaries is a party or of which any property, operations or assets of the Company or any of its subsidiaries is the subject. To the Company’s knowledge, no such proceeding, litigation or arbitration is threatened or contemplated.

3. Conditions of the Underwriters' Obligations. The obligations of the Underwriters under this Agreement are several and not joint. The respective obligations of the Underwriters to purchase the Securities are subject to each of the following terms and conditions:

(a) The Registration Statement has become effective and at the Closing Date no stop order suspending the effectiveness of the Registration Statement shall be in effect and no proceedings for such purpose shall be pending before or threatened by the Commission, and any requests for additional information on the part of the Commission (to be included in the Registration Statement or the Prospectus or otherwise) shall have been complied with to the satisfaction of the Commission and the Representative. A prospectus containing Rule 430B Information shall have been filed with the Commission in the manner and within the period required by Rule 424(b) (without reliance on Rule 424(b)(8)) or a post-effective amendment providing such information shall have been promptly filed and declared effective in accordance with the requirements of Rule 430B. Any material required to be filed by the Company pursuant to Rule 433(d) of the Rules shall have been timely filed with the Commission in accordance with such rule.

(b) The representations and warranties of the Company contained in this Agreement and in the certificates delivered pursuant to Section 3(d) shall be true and correct when made and on and as of each Closing Date as if made on such date. The Company shall have performed in all material respects all covenants and agreements and satisfied all the conditions contained in this Agreement required to be performed or satisfied by it at or before such Closing Date.

(c) The Representative shall have reasonably determined, and advised the Company, that the Registration Statement or the Prospectus, or any amendment thereof or supplement thereto contains an untrue statement of fact which, in the Representative's reasonable opinion, is material, or omits to state a fact which, in the Representative's reasonable opinion, is material and is required to be stated therein or necessary to make the statements therein not misleading.

(d) The Representative shall have received on each Closing Date a certificate, addressed to the Representative and dated such Closing Date, of the chief executive officer and chief financial officer of the Company to the effect that: (i) the representations, warranties and agreements of the Company in this Agreement were true and correct when made and are true and correct as of such Closing Date; (ii) the Company has performed in all material respects all covenants and agreements and satisfied all conditions contained herein; (iii) they have carefully examined the Registration Statement, the Prospectus, the General Disclosure Package, and any individual Issuer-Represented Free Writing Prospectus and, in their opinion (A) as of each Closing Date, neither (i) the General Disclosure Package, nor (ii) any individual Issuer-Represented Free Writing Prospectus, when considered together with the General Disclosure Package, included, any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (B) since the Effective Date no event has occurred which should have been set forth in a supplement or otherwise required an amendment to the Registration Statement, the General Disclosure Package or the Prospectus; (iv) no stop order suspending the effectiveness of the Registration Statement has been issued and, to their knowledge, no proceedings for that purpose have been instituted or are pending under the Securities Act; and (v) there has not occurred any Material Adverse Effect or any event that is likely to result in a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business.

(e) The Representative shall have received: (i) simultaneously with the execution of this Agreement a signed letter from each Auditor addressed to the Representative and dated the date of this Agreement, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type ordinarily included in

accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the General Disclosure Package, and (ii) on each Closing Date, a signed letter from each Auditor addressed to the Representative and dated the date of such Closing Date(s), in form and substance reasonably satisfactory to the Representative containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus.



(f) On each Closing Date, the Representative shall have received the favorable opinion, dated as of such Closing Date, of Norton Rose Fulbright US LLP, as counsel to the Company, in form and substance reasonably satisfactory to counsel for the Underwriters.

(g) On each Closing Date, the Representative shall have received the favorable intellectual property legal opinion, dated as of such Closing Date, from intellectual property legal counsel to the Company, in form and substance reasonably satisfactory to counsel for the Underwriters.

(h) On each Closing Date, the Representative shall have received the favorable legal opinion, dated as of such Closing Date, from British Virgin Island counsel to the Company, in form and substance reasonably satisfactory to counsel for the Underwriters.

(i) On each Closing Date, there shall have been furnished to the Underwriters the negative assurance letter of Harter Secrest & Emery LLP, counsel to the Underwriters, dated such Closing Date, as applicable, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.

(j) All proceedings taken in connection with the sale of Securities and the Option Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representative and their counsel.

(k) The Representative shall have received copies of the Lock-up Agreements in form and substance reasonably satisfactory to counsel for the Underwriters executed by each entity or person listed on Schedule IV hereto.

(l) The Company shall have taken no action designed to, or likely to have the effect of terminating the registration of the Common Stock and Warrants under the Exchange Act or delisting or suspending from trading the Common Stock and Warrants from the NASDAQ Capital Market, nor has the Company received any information suggesting that the Commission or NASDAQ Capital Market is contemplating terminating such registration or listing. The Securities, the Warrants and shares of Common Stock underlying the Warrants and Representative's Warrants shall be DTC eligible.

(m) Subsequent to the execution and delivery of this Agreement or, if earlier, the dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus: (i) there shall not have been any material change in the capital stock of the Company or any material change in the indebtedness (other than in the ordinary course of business) of the Company or its subsidiaries, (ii) except as set forth or contemplated by the Registration Statement, the General Disclosure Package or the Prospectus, no material oral or written agreement or other transaction shall have been entered into by the Company that is not in the ordinary course of business or that could reasonably be expected to result in a material reduction in the future earnings of the Company, (iii) no loss or damage (whether or not insured) to the property of the Company shall have been sustained that had or could reasonably be expected to have a Material Adverse Effect, (iv) no legal or governmental action, suit or proceeding affecting the Company or any of its properties that is material to the Company or that affects or could reasonably be expected to affect the transactions contemplated by this Agreement shall have been instituted or threatened and (v) there shall not have been any material change in the assets, properties, condition (financial or otherwise), or in the results of operations, business affairs or business prospects of the Company or its subsidiaries considered as a whole that makes it impractical or inadvisable in the Representative's judgment to proceed with the purchase or offering of Securities as contemplated hereby.

(n) On Securities Closing Date, FINRA shall have confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and agreements in connection with the Offering.

(o) The Company shall have furnished or caused to be furnished to the Representative such further customary certificates or documents as the Representative shall have reasonably requested.

If any of the conditions specified in this Section 3 shall not have been fulfilled when and as required by this Agreement, the obligations of the Underwriters to consummate the Closing hereunder may be cancelled by the Representative after notice of such cancellation shall have been given to the Company in writing and the Company shall have been given a reasonable period of time to satisfy such condition (if such condition is capable of being satisfied).

#### 4. Covenants and Other Agreements of the Company.

(a) The Company covenants and agrees as follows:

(i) The Company shall comply with the requirement of Rule 430B, as applicable, and shall promptly advise the Representative in writing (A) when any post-effective amendment to the Registration Statement shall have become effective or any supplement to the Prospectus shall have been filed, (B) of any request by the Commission for any amendment of the Registration Statement or the Prospectus or for any additional information, (C) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus or any "free writing prospectus", as defined in Rule 405 of the Rules, or the institution or threatening of any proceeding for that purpose and (D) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose. The Company will promptly effect the filings necessary pursuant to Rule 424(b) in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)) and will take steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company shall not file any amendment of the Registration Statement or supplement to the Prospectus or any Issuer-Represented Free Writing Prospectus unless the Company has furnished the Representative a copy for its review prior to filing and shall not file any such proposed amendment or supplement to which the Representative reasonably objects. The Company shall use its best efforts to prevent the issuance of any such stop order and, if issued, to obtain as soon as possible the withdrawal thereof.

(ii) If, at any time when a prospectus relating to Securities (or, in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act, any event occurs as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading, or if it shall be necessary to amend or supplement the Prospectus to comply with the Securities Act or the Rules, the Company promptly shall prepare and file with the Commission, subject to the third sentence of Paragraph (i) of this Section 4(a), an amendment or supplement which shall correct such statement or omission or an amendment which shall effect such compliance.

(iii) If at any time following issuance of an Issuer-Represented Free Writing Prospectus there occurs an event or development as a result of which such Issuer-Represented Free Writing Prospectus would conflict with the information contained in the Registration Statement or would include an untrue statement of a material fact or would omit 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 prevailing at the subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Issuer-Represented Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(iv) The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to securityholders as soon as practicable an earnings statement for the purposes of, and to provide the benefits contemplated by, the last paragraph of Section 11(a) of the Securities Act.

(v) The Company shall furnish to the Representative and counsel for the Underwriters, without charge, signed copies of the Registration Statement (including all exhibits thereto and amendments thereof) and to each other Underwriter a copy of the Registration Statement (without exhibits thereto) and all amendments thereof and, so long as delivery of a prospectus by an Underwriter or dealer may be required by the Securities Act or the Rules, as many copies of any Preliminary Prospectus, any Issuer-Represented Free Writing Prospectus and the Prospectus and any amendments thereof and supplements thereto as the Representative may reasonably request. If applicable, the copies of the Registration Statement, preliminary prospectus, any Issuer-Represented Free Writing Prospectus and Prospectus and each amendment and supplement thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(vi) The Company shall cooperate with the Representative and its counsel in endeavoring to qualify Securities for offer and sale in connection with the Offering under the laws of such jurisdictions as the Representative may designate and shall maintain such qualifications in effect so long as required for the distribution of the Securities; provided, however, that the Company shall not be required in connection therewith, as a condition thereof, to qualify as a foreign corporation or to execute a general consent to service of process in any jurisdiction or subject itself to taxation as doing business in any jurisdiction.

(vii) The Company, during the period when the Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act and the Rules or the Exchange Act, will file all reports and other documents required to be filed with the Commission pursuant to Section 13, 14 or 15 of the Exchange Act within the time periods required by the Exchange Act and the regulations promulgated thereunder.

(viii) The Company shall, during the term of the Lock-Up Agreements, enforce the terms thereof and impose stop-transfer restrictions on any sale or other transfer or disposition of Company securities until the end of the term of the Lock-Up Agreements.

(ix) On or before completion of this Offering, the Company shall make all filings required under applicable securities laws and by the NASDAQ Capital Market (including any required registration under the Exchange Act).

(x) The Company will issue no press release or other communications directly or indirectly and hold no press conference with respect to the Company, its condition, financial or otherwise, or its earnings, business affairs or business prospects, or the Offering for a period of time ending on the first business day following the forty-fifth (45) day following the Closing Date, without the prior written consent of the Representative other than normal and customary releases issued in the ordinary course of the Company's business or as required by law.



(xi) The Company will apply the net proceeds from the Offering in the manner set forth under “Use of Proceeds” in the Prospectus.

(xii) The Company will use its best efforts to effect and maintain the listing of the Securities (including the Common Stock into which the Warrant and the Representative’s Warrant may be converted) on the NASDAQ Capital Market for at least three years after the Closing Date.

(xiii) Except with respect to (x) the issuance of securities pursuant to the exercise or conversion of outstanding options or warrants or other rights to receive securities of the Company that exist as of the Closing Date; or (y) the issuance of securities pursuant to the Company’s 2005 Incentive Stock Plan, as amended, during the ninety (90) days following the Closing Date, the Company will not undertake any public or private offerings of any equity securities of the Company without the prior written consent of the Representative, which consent will not be unreasonably withheld.

(xiv) The Company will not take, and will cause its affiliates (as such term is defined by Rule 144 of the Act) not to take, directly or indirectly, any action which constitutes or is designed to cause or result in, or which could reasonably be expected to constitute, cause or result in, the stabilization or manipulation of the prices of any security to facilitate the sale or resale of the Securities.

(xv) For so long as they are legally required to do so, the Company will use its best efforts to comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act that are in effect.

(b) The Company agrees to pay, or reimburse if paid by the Representative, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated, all costs and expenses incident to the Offering up to a maximum of \$90,000, including the reimbursement of the fees of the Underwriter’s legal counsel, Harter Secrest & Emery LLP, and the performance of the obligations of the Company under this Agreement including those relating to: (i) the preparation, printing, reproduction filing and distribution of the Registration Statement including, but not limited to, all exhibits thereto, each Preliminary Prospectus, the Prospectus, any Issuer- Represented Free Writing Prospectus, all amendments and supplements thereto, and the printing, filing and distribution of this Agreement; (ii) the preparation and delivery of certificates for the Securities to the Underwriters, if any; (iii) the registration or qualification of Securities and/or the Common Stock underlying the Warrant and Representative’s Warrant for offer and sale under the securities or Blue Sky laws of the various requisite jurisdictions, including the reasonable fees and disbursements of counsel for the Underwriters (not to exceed \$10,000) in connection with such registration and qualification and the preparation, printing, distribution and shipment of preliminary and supplementary Blue Sky memoranda; (iv) the furnishing (including costs of shipping and mailing) to the Representative and to the Underwriters of copies of each Preliminary Prospectus, the Prospectus and all amendments or supplements to the Prospectus, any Issuer-Represented Free Writing Prospectus, and of the several documents required by this Section to be so furnished, as may be reasonably requested for use by the Underwriters or by dealers to whom Securities may be sold in connection with the Offering; (v) the filing fees of FINRA in connection with its review of the terms of the Offering and reasonable fees and disbursements of counsel for the Underwriters in connection with such review; and (vi) inclusion of the Securities (and the Common Stock into which the Warrants and Representative’s Warrant may be converted) for listing on the NASDAQ Capital Market. In addition to the foregoing and the fees in Section 1, the Company has provided the Representative (but no other Underwriter) an advance in the maximum amount of \$25,000 for its expenses (which amount shall be inclusive of the advances made to the Representative prior to the date hereof), including legal fees, background search firm fees, and road show expenses, incurred in connection with the Offering (collectively, the “Advance”), provided that any funds provided under the Advance shall be applied solely towards the Representative’s accountable out-of-pocket expenses actually anticipated

to be incurred by the Representative and its agents. Any unused portion of the Advance shall be returned to the Company upon the termination of the "Engagement Period" (as defined in the engagement letter agreement between the Company and the Representative dated March 13, 2015, as amended from time to time). The Advance is not a separate item of compensation and any expenditures under the Advance shall be credited against the expense allowance described in this Section 4(b). Under no circumstances will the Company be obligated to reimburse the Representative for more than \$90,000 of its expenses. Except to the extent otherwise expressly provided for in this Agreement, the Underwriter shall pay its own costs and expenses, including the fees and expenses of legal counsel in connection with the Offering. For purposes of clarity, the underwriter's counsel fees and expenses in connection with the FINRA review as referenced in clause (v) of this section 4(b) are included in the Advance and are not an additional item of value.

(c) The Company acknowledges and agrees that each of the Underwriters has acted and is acting solely in the capacity of a principal in an arm's length transaction between the Company and the Underwriters with respect to the offering of Securities contemplated hereby (including in connection with determining the terms of the Offering) and not as a financial advisor, agent or fiduciary to the Company or any other person. Additionally, the Company acknowledges and agrees that the Underwriters have not and will not advise the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company has consulted with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Underwriters shall have no responsibility or liability to the Company or any other person with respect thereto, whether arising prior to or after the date hereof. Any review by the Underwriters of the Company, the transactions contemplated hereby or other matters relating to such transactions have been and will be performed solely for the benefit of the Underwriters and shall not be on behalf of the Company. The Company agrees that it will not claim that the Underwriters, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary duty to the Company or any other person in connection with any such transaction or the process leading thereto.

(d) The Company represents and agrees that, unless it obtains the prior consent of the Representative, and each Underwriter represents and agrees that, unless it obtains the prior consent of the Company and the Representative, it has not made and will not make any offer relating to Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405, required to be filed with the Commission. The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer-Represented Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping.

5. Indemnification.

(a) The Company agrees to indemnify, defend and hold harmless the Underwriters, their respective affiliates, directors and officers and employees, and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which such Underwriter or such person may become subject, under the Securities Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon: (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Rules and Regulations, or arise out of or are based upon the omission from the Registration Statement, or alleged omission to state therein, a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) an untrue statement or alleged untrue statement of a material fact contained in the General Disclosure Package, the Prospectus, or any amendment or supplement thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Registration Statement or the Prospectus), any Issuer-Represented Free Writing Prospectus or in any other materials used in connection with the Offering, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, (iii) in whole or in part, any inaccuracy in the representations and warranties of the Company contained herein, or (iv) in whole or in part, any failure of the Company to perform its obligations hereunder or under applicable law, and will reimburse the Underwriters for its reasonable legal or other out of pocket expenses reasonably incurred by it in connection with evaluating, investigating or defending against such loss, claim, damage, liability or action; provided, however, that (y) the Company will only be obligated to reimburse the Underwriters for the cost and expense of one counsel (in addition to any local counsel) and provided further that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the General Disclosure Package, the Prospectus, or any amendment or supplement thereto or any Issuer-Represented Free Writing Prospectus, in reliance upon and in conformity with the Underwriter Information; and (z) with respect to any untrue statement or omission or alleged untrue statement or omission made in the Preliminary Prospectus, if any, the indemnity agreement contained in this Section 5(a) shall not inure to the benefit of an Underwriter to the extent that any losses, claims, damages or liabilities of such Underwriter results from the fact that a copy of the Preliminary Prospectus was not given or sent to the person asserting any such loss, claims, damage or liability at or prior to the written confirmation of sale of Securities to such person as required by the Securities Act and the rules and regulations thereunder, and if the untrue statement or omission has been corrected in the Prospectus, unless such failure to deliver the Prospectus was a result of non-compliance by the Company with its obligations under this Agreement. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless (i) the Company, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act and (ii) each director of the Company, and each officer of the Company who signs the Registration Statement, against any losses, claims, damages or liabilities to which such party may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent,



that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Prospectus, the Registration Statement, the General Disclosure Package or the Prospectus or any such amendment or supplement in reliance upon and in conformity with the Underwriter Information and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with evaluating, investigating or defending any such action or claim as such expenses are incurred; provided, however, that the obligation of each Underwriter to indemnify the Company (including any controlling person, director or officer thereof) shall be limited to the amount of the underwriting discount and commissions applicable to Securities to be purchased by such Underwriter hereunder.

(c) Any party that proposes to assert the right to be indemnified under this Section will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section, notify each such indemnifying party of the commencement of such action, suit or proceeding, enclosing a copy of all papers served. No indemnification provided for in Section 5(a) or 5(b) shall be available to any party who shall fail to give notice as provided in this Section 5(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was prejudiced by the failure to give such notice but the omission so to notify such indemnifying party of any such action, suit or proceeding shall not relieve it from any liability that it may have to any indemnified party for contribution or otherwise than under this Section. In case any such action, suit or proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with one firm of legal counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof and the approval by the indemnified party of such counsel, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses, except as provided below and except for the reasonable costs of investigation subsequently incurred by such indemnified party in connection with the defense thereof. The indemnified party shall have the right to employ its counsel in any such action, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the employment of counsel by such indemnified party has been authorized in writing by the indemnifying parties, (ii) the indemnified party shall have been advised by counsel that there may be one or more legal defenses available to it which are different from or in addition to those available to the indemnifying party (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party) or (iii) the indemnifying parties shall not have employed counsel to assume the defense of such action within a reasonable time after notice of the commencement thereof, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying parties. An indemnifying party shall not be liable for any settlement of any action, suit, and proceeding or claim effected without its written consent, which consent shall not be unreasonably withheld or delayed. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

6. Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in Section 5(a) or 5(b) is due in accordance with its terms but for any reason is unavailable or insufficient to hold harmless an indemnified party in respect to any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate losses, liabilities, claims, damages and expenses (including any investigation, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claims asserted, but after deducting any contribution received by any person entitled hereunder to contribution from any person who may be liable for contribution) incurred by such indemnified party, as incurred, in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the Offering pursuant to this Agreement or, if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations. The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 6

were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above shall be deemed to include any reasonable legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding the provisions of this Section 6, no Underwriter (except as may be provided in the agreement among underwriters) shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to Securities purchased by such Underwriter. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 6, each person, if any, who controls an Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as such Underwriter, and each director or partner of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Section 15 of the Securities Act or Section 20 of the Exchange Act, shall have the same rights to contribution as the Company. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim for contribution may be made against another party or parties under this Section 6, notify such party or parties from whom contribution may be sought, but the omission so to notify such party or parties from whom contribution may be sought shall not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have hereunder or otherwise than under this Section 6. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its written consent. The Underwriters' obligations to contribute pursuant to this Section 6 are several in proportion to their respective underwriting commitments and not joint.

7. Termination.

(a) This Agreement may be terminated with respect to Securities to be purchased on a Closing Date by the Representative by notifying the Company at any time at or before a Closing Date if: (i) any domestic or international event or act or occurrence has materially disrupted, or in the reasonable opinion of the Representative will in the immediate future materially disrupt, the market for the Company's securities or securities in general; (ii) there has occurred any outbreak or material escalation of hostilities or acts of terrorism or other calamity or crisis the effect of which on the financial markets of the United States is such as to make it, in the reasonable judgment of the Representative, inadvisable or impracticable to market Securities or enforce contracts for the sale of Securities; (iii) trading in the any securities of the Company has been suspended or materially limited by the Commission or trading generally on the New York Stock Exchange, the NYSE MKT or the NASDAQ Capital Market has been suspended or materially limited, or minimum or maximum ranges for prices for securities shall have been fixed, or maximum ranges for prices for securities have been required, by any of said exchanges or by such system or by order of the Commission, FINRA, or any other governmental or regulatory authority; (iv) a banking moratorium has been declared by any state or Federal authority; or (v) in reasonable judgment of the Representative, there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Prospectus, a Material Adverse Effect, whether or not arising in the ordinary course of business, such as to make it, in the reasonable judgment of the Representative, inadvisable or impracticable to market the Securities or enforce contracts for the sale of the Securities.

(b) If this Agreement is terminated pursuant to any of its provisions, the Company will not be under any liability to any Underwriter, and no Underwriter shall be under any liability to the Company, except that (y) the Company will reimburse the Representative only for all actual, accountable out-of-pocket expenses (including the reasonable fees and disbursements of Harter Secrest & Emery LLP, its counsel) reasonably incurred by the Representative in connection with the proposed purchase and sale of the Securities or in contemplation of performing its obligations hereunder subject to a cap of \$90,000 (for purposes of clarity, in the event this Agreement is terminated, the amount of the out-of-pocket accountable expenses that the Company will reimburse to the Representative will be reduced by the amount of the Advance, which includes all of the advances made to the Representative for out-of-pocket accountable expenses), and (z) no Underwriter who shall have failed or refused to purchase Securities agreed to be purchased by it under this Agreement, without some reason sufficient hereunder to justify cancellation or termination of its obligations under this Agreement, shall be relieved of liability to the Company, or to the other Underwriters for damages occasioned by its failure or refusal.

8. Substitution of Underwriters. If any Underwriter shall default in its obligation to purchase on any Securities Closing Date agreed to be purchased hereunder on such Closing Date, the Representative shall have the right, within thirty-six (36) hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase such Securities on the terms contained herein. If, however, the Representative shall not have completed such arrangements within such 36-hour period, then the Company will be entitled to a further period of thirty-six (36) hours within which to procure another party or other parties reasonably satisfactory to the Underwriters to purchase such Securities on such terms. If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number of Securities which remains unpurchased on such Closing Date does not exceed ten percent (10%) of the aggregate number of all Securities that all the Underwriters are obligated to purchase on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Securities which such Underwriter agreed to purchase hereunder at such date and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Securities which such Underwriter agreed to purchase hereunder) of Securities of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default. In any such case, either the Representative or the Company shall have the right to postpone the applicable Closing Date for a period of not more than seven days in order to effect any necessary changes and arrangements (including any necessary amendments or supplements to the Registration Statement or Prospectus or any other documents), and the Company agrees to file promptly any amendments to the Registration Statement or the Prospectus which in the opinion of the Company and the Underwriters and their counsel may thereby be made necessary.

If, after giving effect to any arrangements for the purchase of Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number of such Securities which remains unpurchased exceeds ten percent (10%) of the aggregate number of all Securities to be purchased at such date, then this Agreement, or, with respect to a Closing Date which occurs after Securities Closing Date, the obligations of the Underwriters to purchase and of the Company, as the case may be, to sell the Option Securities to be purchased and sold on such date, shall terminate, without liability on the part of any non-defaulting Underwriter to the Company, and without liability on the part of the Company, except as provided in Sections 4(b), 5, 6 and 7. The provisions of this Section 8 shall not in any way affect the liability of any defaulting Underwriter to the Company or the non-defaulting Underwriters arising out of such default. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section 8 with like effect as if such person had originally been a party to this Agreement with respect to such Securities.

9. Miscellaneous.

(a) The respective agreements, representations, warranties, indemnities and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by or on behalf of them pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or the Company, or any of their respective officers, directors or controlling persons referred to in Sections 5 and 6 hereof, and shall survive delivery of and payment for Securities and the Common Stock underlying the Warrants and Representative's Warrant. In addition, the provisions of Sections 4(b), 5, 6, 7, and 9(a) shall survive the termination or cancellation of this Agreement.

(b) This Agreement has been and is made for the benefit of the Underwriters, the Company, and their respective successors and assigns, and, to the extent expressed herein, for the benefit of persons controlling any of the Underwriters, or the Company, and directors and officers of the Company, and their respective successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. The term “successors and assigns” shall not include any purchaser of Securities from any Underwriter merely because of such purchase.

(c) All notices and communications hereunder shall be in writing and mailed or delivered or by email if subsequently confirmed in writing, (a) if to the Representative, c/o Maxim Group LLC, 405 Lexington Avenue, New York, New York 10174, Attention: Equity Capital Markets, with a copy to Maxim Group LLC, 405 Lexington Avenue, New York, New York 10174, Attention: General Counsel, and to Harter Secrest & Emery LLP, 1600 Bausch & Lomb Place, Rochester, NY 14604, Attention: James M. Jenkins, and (b) if to the Company, to the Company’s agent for service as such agent’s address appears on the cover page of the Registration Statement with a copy to Fulbright & Jaworski LLP, 666 Fifth Avenue, New York, New York 10103, Attention: Merrill M. Kraines.

(d) This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard for conflict of laws principles. Each of the parties hereto hereby submits to the non-exclusive jurisdiction of the Federal and state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. Each of the parties irrevocably and unconditionally waives any objection to the laying of venue of any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby in Federal and state courts in the Borough of Manhattan in The City of New York and irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such suit or proceeding in any such court has been brought in an inconvenient forum. The parties agree, to the extent permitted by law, to waive their rights to a jury trial in any proceeding arising out of this Agreement.

(e) In connection with this Agreement, the Representative will act for and on behalf of the several Underwriters, and any action taken under this Agreement by the Representative, will be binding on all the Underwriters.

(f) If any term or provision of this Agreement or the performance thereof will be invalid or unenforceable to any extent, such invalidity or unenforceability shall not affect or render invalid or unenforceable any other provisions of this Agreement and this Agreement will be valid and enforced to the fullest extent permitted by law.

(g) The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

(h) This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior or contemporaneous written or oral agreements, understandings, promises and negotiations with respect to the subject matter hereof.

- (i) In this Agreement, the masculine, feminine and neuter genders and the singular and the plural include one another. The section headings in this Agreement are for the convenience of the parties only and will not affect the construction or interpretation of this Agreement.
- (j) This Agreement may be amended or modified, and the observance of any term of this Agreement may be waived, only by a writing signed by the Company and the Representative.
- (k) This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Such counterparts may be delivered by facsimile or by e-mail delivery of a “pdf” format data file, which counterparts shall be valid as if original and which delivery shall be valid delivery thereof.

[Signature Page Follows]

Please confirm that the foregoing correctly sets forth the agreement among us.

Very truly yours,

APPLIED DNA SCIENCES, INC.

By: /s/ James A. Hayward  
Name: James A. Hayward  
Title: Chairman, President and Chief Executive Officer

Agreed to and confirmed

REPRESENTATIVE

(acting severally on behalf of itself and as representative of the several Underwriters named on Schedule I annexed hereto.):

MAXIM GROUP LLC

By: /s/ Clifford Teller  
Name: Clifford Teller  
Title: Head of Investment Banking



SCHEDULE I

Underwriters

Name	Number of Securities to be Purchased	
	Common Stock	Warrants
Maxim Group LLC	3,247,000	1,298,800
The Benchmark Company	573,000	229,200
Total	3,820,000	1,528,000

SCHEDULE II

Free Writing Prospectus

None.

SCHEDULE IV

Lock-up Signatories

James A. Hayward

Yacov Shamash

John Bitzer, III

Beth Jantzen

Judith Murrah

Charles Ryan

Ming-Hwa Benjamin Liang

Sanford R. Simon

Joseph Ceccoli

Delabarta, Inc.

EXHIBIT A

Form of Lock-Up Agreement

(See Attached)

Exhibit 4.1

NEITHER THESE SECURITIES NOR THE SECURITIES ISSUABLE UPON THE EXERCISE OF THESE SECURITIES HAVE 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 WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, OR HYPOTHECATED, OR BE THE SUBJECT OF ANY HEDGING, SHORT SALE, DERIVATIVE, PUT, OR CALL TRANSACTION THAT WOULD RESULT IN THE EFFECTIVE ECONOMIC DISPOSITION OF SUCH SECURITIES BY ANY PERSON FOR A PERIOD OF ONE HUNDRED AND EIGHTY (180) DAYS IMMEDIATELY FOLLOWING MARCH [27], 2015, AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION, EXCEPT IN ACCORDANCE WITH FINRA RULE 5110(G)(2).

APPLIED DNA SCIENCES, INC.

COMMON STOCK PURCHASE WARRANT

Original Issue Date: April [1], 2015

Applied DNA Sciences, Inc., a Delaware corporation (the “Company”), hereby certifies that, as partial compensation for its services as underwriter to the Company, Maxim Group LLC, or its registered assigns (the “Holder”), is entitled to purchase from the Company up to a total of \_\_\_\_\_ number of shares of Common Stock (each, a “Warrant” and collectively, the “Warrants,” and each such share of Common Stock, a “Warrant Security” and all such shares of Common Stock, the “Warrant Securities”), at any time and from time to time after the 180th day following March [27], 2015 and through and including, March [27], 2020, the fifth anniversary of such effective date (the “Expiration Date”), in accordance with FINRA Rule 5110(f)(2)(G)(i), and subject to the following terms and conditions:

1. Definitions. As used in this Warrant, the following terms shall have the respective definitions set forth in this Section 1. Other capitalized terms used and not otherwise defined shall have the meanings set forth in that certain Underwriting Agreement, dated March [27], 2015, between the Company and the Holder.

“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 144.

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

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

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Exercise Price” means \$\_\_\_\_\_ (115% of the public offering price in connection with the Offering), subject to adjustment in accordance with Section 9.

“Fundamental Transaction” means any of the following: (1) the Company effects any merger or consolidation of the Company with or into another Person, (2) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (3) any tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to tender or exchange their shares for other securities, cash or property, or (4) the Company effects any reclassification 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.

“New York Courts” means the state and federal courts sitting in the City of New York, Borough of Manhattan.

“Original Issue Date” means the Original Issue Date first set forth on the first page of this Warrant.

“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.

“Rule 144” means Rule 144 promulgated by the Securities and Exchange 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 Securities and Exchange Commission having substantially the same effect as such Rule.

“Securities Act” means the Securities Act of 1933, as amended.

“Subsidiary” means any “significant subsidiary” as defined in Rule 1-02(w) of Regulation S-X promulgated by the Securities and Exchange Commission under the Exchange Act.

“Trading Day” means (i) a day on which the Common Stock is traded on a Trading Market, or (ii) if the Common Stock is not quoted on any Trading Market, a day on which the Common Stock is quoted in the over-the-counter market as reported by OTC Markets Group Inc. (or any similar organization or agency succeeding to its functions of reporting prices); provided, that in the event that the Common Stock is not listed or quoted as set forth in (i) or (ii) hereof, then Trading Day shall mean a Business Day.

“Trading Market” means whichever of the New York Stock Exchange, the NYSE MKT, the NASDAQ Global Select Market, the NASDAQ Global Market, the NASDAQ Capital Market or the OTC Bulletin Board on which the Common Stock is listed or quoted for trading on the date in question.

2. Registration of Warrant. The Company shall register this Warrant upon records to be maintained by the Company for that purpose (the “Warrant Register”), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. The Company shall register the transfer of any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Company at its address specified herein. Upon any such registration or transfer, a new Warrant to purchase Warrant Securities in substantially the form of this Warrant (any such new Warrant, a “New Warrant”), evidencing the portion of this Warrant so transferred shall be issued to the transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations of a holder of a Warrant.

4. Exercise and Duration of Warrants. This Warrant shall be exercisable by the registered Holder at any time and from time to time from and after 181 days following March [27], 2015 (the “Sale Commencement Date”), through and including the Expiration Date in accordance with FINRA Rule 5110(f)(2)(G)(i). At 5:00 p.m., Eastern Standard Time on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be and become void and of no value. The Company may not call or redeem any portion of this Warrant without the prior written consent of the affected Holder. In accordance with FINRA Rule 5110(g)(1), this Warrant shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of this Warrant by any person for a period of 180 days immediately following the Sale Commencement Date, except as provided in FINRA Rule 5110(g)(2).

5. Delivery of Warrant Securities.

(a) Upon delivery of the Exercise Notice (in the form attached hereto) to the Company (with the attached Warrant Exercise Log) at its address for notice set forth herein and upon payment of the Exercise Price multiplied by the number of Warrant Securities that the Holder intends to purchase hereunder, the Company shall promptly (but in no event later than three Trading Days after the Date of Exercise (as defined herein)) issue and deliver to the Holder, a certificate for the Warrant Securities issuable upon such exercise. The Company shall, upon request of the Holder and subsequent to the date on which a registration statement covering the resale of the Warrant Securities has been declared effective by the Securities and Exchange Commission, use its reasonable best efforts to deliver Warrant Securities hereunder electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions, if available, provided, that, the Company may, but will not be required to change its transfer agent if its current transfer agent cannot deliver Warrant Securities electronically through the Depository Trust Corporation. A “Date of Exercise” means the date on which the Holder shall have delivered to the Company: (i) the Exercise Notice (with the Warrant Exercise Log attached to it), appropriately completed and duly signed and (ii) payment of the Exercise Price for the number of Warrant Securities so indicated by the Holder to be purchased.

(b) If by the third Trading Day after a Date of Exercise the Company fails to deliver the required number of Warrant Securities in the manner required pursuant to Section 5(a), then the Holder will have the right to rescind such exercise.

(c) If by the third Trading Day after a Date of Exercise the Company fails to deliver the required number of Warrant Securities in the manner required pursuant to Section 5(a), and if after such third Trading Day and prior to the receipt of such Warrant Securities, the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Securities which the Holder anticipated receiving upon such exercise (a “Buy-In”), then the Company shall (1) pay in cash to the Holder the amount by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (A) the number of Warrant Securities that the Company was required to deliver to the Holder in connection with the exercise at issue by (B) the closing bid price of the Common Stock on the Date of Exercise and (2) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Securities for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock or Warrants that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In, and, upon request, of the Company, evidence of the amount of such loss.

(d) The Company’s obligations to issue and deliver Warrant Securities in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the 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 the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Securities. Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing Warrant Securities upon exercise of the Warrant as required pursuant to the terms hereof.

6. Charges, Taxes and Expenses. Issuance and delivery of Warrant Securities upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, withholding tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; provided, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the registration of any certificates for Warrant Securities or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Securities upon exercise hereof.

7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and customary and reasonable indemnity (which shall not include a surety bond), if requested. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company’s obligation to issue the New Warrant.



8. **Reservation of Warrant Securities.** The Company covenants that it will at all times reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved shares of Common Stock solely for the purpose of enabling it to issue Warrant Securities upon exercise of this Warrant as herein provided, the number of shares of Common Stock which are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of Persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Securities so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly authorized, validly issued and fully paid and non-assessable.

9. **Certain Adjustments.** The Exercise Price and number of Warrant Securities issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) **Stock Dividends and Splits.** If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides outstanding shares of Common Stock into a larger number of shares, or (iii) combines outstanding shares of Common Stock into a smaller number of shares, then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock 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 clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) **Fundamental Transactions.** If, at any time while this Warrant is outstanding there is a Fundamental Transaction, then the Holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Securities then issuable upon exercise in full of this Warrant (the "Alternate Consideration"). For purposes of any such exercise, the determination of the Exercise 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 Company shall apportion the Exercise 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 exercise of this Warrant following such Fundamental Transaction. At the Holder's option and request, any successor to the Company or surviving entity in such Fundamental Transaction shall issue to the Holder a new warrant substantially in the form of this Warrant and consistent with the foregoing provisions and evidencing the Holder's right to purchase the Alternate Consideration for the aggregate Exercise Price upon exercise thereof. The terms of any agreement pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity to comply with the provisions of this paragraph (b) and insuring that the Warrant (or any such replacement security) will be similarly adjusted upon any subsequent transaction analogous to a Fundamental Transaction.

(c) **Adjustments for Other Distributions.** In the event the Company shall declare a distribution on the outstanding Common Stock that is payable in securities of other Persons, evidences of indebtedness issued by the Company or other Persons, assets (excluding cash dividends or distributions to the holders of Common Stock paid out of current or retained earnings and declared by the Company's Board of Directors) or options or rights, then, in each such case for

the purpose of this Section 9(c), upon exercise of this Warrant, the Holder shall be entitled to a proportionate share of any such distribution as though the Holder was the actual record holder of the number of shares of Common Stock which might have been purchased upon exercise of this Warrant immediately prior to the record date fixed for the determination of the holders of Common Stock of the Company entitled to receive such distribution (or the date of such distribution if no record date is fixed).

(d) Subsequent Rights Offering. In addition to any adjustments pursuant to Section 9(c) above, if at any time during which this Warrant is outstanding, the Company grants, issues or sells any Common Stock equivalents or other 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 exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, beneficial ownership limitations) 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 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 beneficial ownership limitations). The provisions of this Section 9(d) will not apply to any grant, issuance or sale of Common Stock equivalents or other rights to purchase stock, warrants, securities or other property of the Company which is not made pro rata to the record holders of any class of shares of Common Stock.

(e) Number of Warrant Securities. Simultaneously with any adjustment to the Exercise Price pursuant to this Section 9, the number of Warrant Securities that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Securities shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(f) Calculations. All calculations under this Section 9 shall be made to the nearest cent or the nearest 1/100th of a share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(g) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will promptly compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Securities or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's Transfer Agent.

(h) Notice of Corporate Events. If the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including without limitation any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any Subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Holder a notice describing the material terms and conditions of such transaction (but only to the extent such disclosure would not result in the dissemination of material, non-public information to the Holder) at least 10 calendar days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction, and the Company will take all steps reasonably necessary in order to insure that the Holder is given the practical opportunity to exercise this Warrant prior to such time so as to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

10. Payment of Exercise Price. The Holder may pay the Exercise Price in one of the following manners:

(a) Cash Exercise. The Holder may deliver immediately available funds; or

(b) Cashless Exercise. If on the Date of Exercise there is no effective registration statement registering, or the prospectus contained therein is not available for, the resale of the Warrant Securities, the Holder may notify the Company in an Exercise Notice of its election to utilize cashless exercise, in which event the Company shall issue to the Holder the number of Warrant Securities determined as follows:

$$X = Y [(A-B)/A]$$

where:

X = the number of Warrant Securities to be issued to the Holder.

Y = the number of Warrant Securities with respect to which this Warrant is being exercised.

A = the average of the daily volume weighted average price of the Common Stock for the five Trading Days immediately prior to (but not including) the Date of Exercise.

B = the Exercise Price.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Securities issued in a cashless exercise transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Securities shall be deemed to have commenced, on the date this Warrant was originally issued.

11. Limitations on Exercise. Notwithstanding anything to the contrary contained herein, the number of Warrant Securities that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by such Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act, does not exceed 9.99% of the total number of issued and outstanding shares of Common Stock (including for such purpose the shares of Common Stock issuable upon such exercise). For such purposes, beneficial ownership shall be determined 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 11 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of an Exercise Notice shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable, in each case subject the limitation contained in this Section 11, and the Company shall have no obligation to verify or confirm the accuracy of such determination. This provision shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9 of this Warrant. This restriction may not be waived. Notwithstanding anything to the contrary contained in this Warrant, (a) no term of this Section may be waived by any party, nor amended such that the threshold percentage of ownership would be directly or indirectly increased, (b) this restriction runs with the Warrant and may not be modified or waived by any subsequent holder hereof and (c) any attempted waiver, modification or amendment of this Section will be void ab initio.

12. No Fractional Shares. No fractional Warrant Securities will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares which would, otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the closing price of one share of Common Stock as reported by the applicable Trading Market on the date of exercise.

### 13. Registration Rights.

(a) Demand Registration. The Company, upon written demand (a "Demand Notice") by the Holder, and if the Holder has assigned a portion of the Warrant, of the holders, agrees to register (a "Demand Registration"), on one occasion, all or any portion of the Warrant Securities. On such occasion, the Company will file a registration statement or a post-effective amendment to the Registration Statement covering the Warrant Securities within sixty (60) days after receipt of a Demand Notice and use its best efforts to have such registration statement or post-effective amendment declared effective promptly thereafter, subject to compliance with review by the Commission; provided, however, that the Company shall not be required to comply with a Demand Notice if the Company has filed a registration statement with respect to which the Holder is entitled to piggyback registration rights pursuant to Section 13(b) hereof and either: (i) the Holder was given the opportunity to exercise its rights under Section 13(b) hereof in connection with the offering covered by such registration statement or (ii) if such registration statement relates to an underwritten primary offering of securities of the Company, until the offering covered by such registration statement has been withdrawn or until thirty (30) days after such offering is consummated. A Demand Notice may be given at any time during the period of four and a half (4.5) years beginning 180 days from the Sale Commencement Date. The Company covenants and agrees, if the Holder has assigned a portion of this Warrant, to give written notice of its receipt of the Demand Notice by any Holder to all other registered Holder of the Warrants and/or the Warrant Securities within ten (10) days from the date of the receipt of such Demand Notice. The Holder, or if the Warrant has been assigned, the Holders, shall not effect more than two (2) Demand Registrations pursuant to this Section 13(a). A registration will not count as

a Demand Registration until the registration statement filed with the Commission with respect to such Demand Registration has been declared effective and the Company has complied with all of its obligations under hereunder with respect thereto; provided, however, that if, after such registration statement has been declared effective, the offering of the Warrant Securities pursuant to a Demand Registration is interfered with by any stop order or injunction of the Commission or any other governmental agency or court, the registration statement with respect to such Demand Registration will be deemed not to have been declared effective, unless and until, (i) such stop order or injunction is removed, rescinded or otherwise terminated, and (ii) the Holder thereafter elect to continue the offering. The Company shall bear all fees and expenses attendant to the first Demand Registration pursuant to Section 13(a), including the reasonable and documented expenses of a single legal counsel selected by the Holders to represent them in connection with the sale of the Warrant Securities, but the Holders shall pay any and all underwriting commissions or brokerage fees related to the Warrant Securities, if applicable. The Holders shall bear all fees and expenses (including all underwriting commissions and the expenses of any legal counsel selected by the Holders to represent them) in connection with the second Demand Registration pursuant to Section 13(a). The Company agrees to use its best efforts to cause the filing required herein to become effective promptly and to qualify or register the Warrant Securities in such States as are reasonably requested by the Holder, or if the Warrant has been assigned, by the Holders; provided, however, that in no event shall the Company be required to register the Warrant Securities in a State in which such registration would cause: (i) the Company to be obligated to register or license to do business in such State or submit to general service of process in such State, or (ii) the principal stockholders of the Company to be obligated to escrow their shares of capital stock of the Company. The Company shall use its commercially reasonable efforts to cause any registration statement filed pursuant to the demand right granted under Section 13(a) to remain effective for a period of at least twelve (12) consecutive months from the date that the Holder of the Warrant Securities covered by such registration statement are first given the opportunity to sell all of such securities. The Holder shall only use the prospectuses provided by the Company to sell the shares covered by such registration statements, and will immediately cease to use any prospectus furnished by the Company if the Company advises the Holder that such prospectus may no longer be used due to a material misstatement or omission.

(b) “Piggy-Back” Registration. In addition to the demand rights of registration described in Section 13(a) hereof, the Holder shall have the right, for a period of five (5) years commencing 180 days from the Sale Commencement Date, to include the Warrant Securities as part of any other registration of securities filed by the Company (other than in connection with a transaction contemplated by Rule 145(a) promulgated under the Securities Act or pursuant to Form S-8 or S-4 or any equivalent form); provided, however, that if, solely in connection with any primary underwritten public offering for the account of the Company, the managing underwriter(s) thereof shall, in its reasonable discretion, impose a limitation on the number of Warrant Securities which may be included in the registration statement because, in such underwriter(s)’ judgment, marketing or other factors dictate such limitation is necessary to facilitate public distribution, then the Company shall be obligated to include in such registration statement only such limited portion of the Warrant Securities with respect to which the Holder requested inclusion hereunder as the underwriter(s) shall reasonably permit. Any exclusion of Warrant Securities shall be made pro rata among the Holder, or if the Warrant has been assigned, to the Holders seeking to include Warrant Securities in proportion to the number of Warrant Securities sought to be included by such Holders; provided, however, that the Company shall not exclude any Warrant Securities unless the Company has first excluded all outstanding securities, the holders of which are not entitled to inclusion of such securities in such registration statement or are not entitled to pro rata inclusion with the Warrant Securities. The Holders shall be entitled to unlimited piggy-back registration rights pursuant to this Section 13(b). Any holder of the Warrant Securities may elect to withdraw such Holder’s request for inclusion of the Warrant Securities in any piggy-back registration by giving written notice to the Company of such request to withdraw prior to the effectiveness of the registration statement. The Company (whether on its own determination or as the result of a withdrawal by persons making a demand pursuant to written contractual obligations) may withdraw a registration statement at any time prior to the effectiveness of the registration statement. Notwithstanding any such withdrawal, the Company shall pay all expenses incurred by the Holders of the Warrant Securities in connection with such piggy-back registration as provided in Section 13(b). The Company shall bear all fees and expenses attendant to registering the Warrant Securities pursuant to Section 13(b) hereof, including the reasonable and documented expenses of a single legal counsel selected by the Holders to represent them in connection with the sale of the Warrant Securities, but the Holders shall pay any and all underwriting commissions or brokerage fees related to the Warrant Securities. In the event of such a proposed registration, the Company shall furnish the then Holders of outstanding Warrant Securities with not less than fifteen (15) days written notice prior to the proposed date of filing of such registration statement. Such notice to the Holders shall continue to be given for each registration statement filed by the Company until such time as all of the Warrant Securities have been sold by the Holder. The holders of the Warrant Securities shall exercise the “piggy-back” rights provided for herein by giving written notice, within ten (10) days of the receipt of the Company’s notice of its intention to file a registration statement. The Company shall use its best efforts to cause any registration statement filed pursuant to the piggyback right granted under Section 13(b) to remain effective for a period of at least nine (9) consecutive months from the date that the Holders of the Warrant Securities covered by such registration statement are first given the opportunity to sell all of such securities.

14. Notices. Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and 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 specified in this Section prior to 5:00 p.m. (Eastern Standard Time) on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section on a day that is not a Trading Day or later than 6:30 p.m. (Eastern Standard Time) on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The addresses for such communications shall be: (i) if to the Company, to Applied DNA Sciences, Inc., 50 Health Sciences Drive, Stony Brook, New York 11790, Attention: Chief Executive Officer (or such other address as the Company shall indicate in writing in accordance with this Section), or via facsimile to (631) 240-8900, or (ii) if to the Holder, to the address or facsimile number appearing on the Warrant Register or such other address or facsimile number as the Holder may provide to the Company in accordance with this Section.

15. Miscellaneous.

(a) This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder and their successors and assigns. The foregoing sentence shall be subject to the restrictions on waivers and amendments set forth in Section 11 of this Warrant.

(b) The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.



(c) All questions concerning the construction, validity, enforcement and interpretation of this Warrant 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 this Warrant and the transactions herein contemplated (“Proceedings”) (whether brought against a party hereto or its respective Affiliates, employees or agents) shall be commenced exclusively in 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, and hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such 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 Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. 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 Warrant or the transactions contemplated hereby. If either party shall commence a Proceeding to enforce any provisions of this Warrant, then the prevailing party in such Proceeding shall be reimbursed by the other party for its attorney’s fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Proceeding.

(d) The failure of any of the parties hereto to at any time enforce any of the provisions of this Warrant shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Warrant or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Warrant. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Warrant shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

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

(f) In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

(g) Prior to exercise of this Warrant, the Holder hereof shall not, by reason of being a Holder, be entitled to any rights of a stockholder with respect to the Warrant Securities, except as set forth herein.

[Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

APPLIED DNA SCIENCES, INC.

By:  
Name: James A.  
Hayward  
Title: Chief  
Executive Officer

EXERCISE NOTICE  
APPLIED DNA SCIENCES, INC.  
WARRANT DATED APRIL [1], 2015

The undersigned Holder hereby irrevocably elects to purchase Warrant Securities pursuant to the above referenced Warrant. Capitalized terms used herein and not otherwise defined have the respective meanings set forth in the Warrant.

- (1) The undersigned Holder hereby exercises its right to purchase Warrant Securities pursuant to the Warrant.
- (2) (PLEASE CHECK ONE METHOD OF PAYMENT)
  - o The Holder shall pay the sum of \$\_\_\_ to the Company in accordance with the terms of the Warrant; or
  - o The Holder shall exercise the Warrant through a cashless exercise in accordance with the terms of the Warrant.
- (3) Pursuant to this Exercise Notice, the Company shall deliver to the holder Warrant Securities in accordance with the terms of the Warrant.
- (4) Please issue said Warrant Securities in the name of the undersigned or in such other name as is specified here: \_\_\_\_\_.
- (5) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (determined in accordance with Section 13(d) of the Securities Exchange Act of 1934) permitted to be owned under Section 11 of this Warrant to which this notice relates.

Dated: \_\_\_\_\_

Name of Holder:

(Print)

Name:

Title:

Date:

(Signature must conform in all respects to name of holder as specified on the face of the Warrant.)

WARRANT EXERCISE LOG

Date	Number of Warrant Securities Available to be Exercised	Number of Warrant Securities Exercised	Number of Warrant Securities Remaining to be Exercised
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APPLIED DNA SCIENCES, INC.  
WARRANT DATED APRIL [1], 2015

ASSIGNMENT FORM

(To assign the foregoing warrant, execute  
this form and supply required information.  
Do not use this form to exercise the warrant.)

FOR VALUE RECEIVED, [\_\_\_\_] all of or [\_\_\_\_\_] shares of the foregoing Warrant and all rights evidenced  
thereby are hereby assigned to

\_\_\_\_\_ whose address is  
\_\_\_\_\_  
\_\_\_\_\_.

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

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_  
\_\_\_\_\_

Signature Guaranteed: \_\_\_\_\_

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the  
Warrant, without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank or trust  
company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper  
evidence of authority to assign the foregoing Warrant.

**Annex B**

**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): April 1, 2015

**Applied DNA Sciences, Inc.**

(Exact name of registrant as specified in its charter)

<b>Delaware</b> (State or other jurisdiction of incorporation)	<b>002-90539</b> (Commission File Number)	<b>59-2262718</b> (IRS Employer Identification No.)
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**50 Health Sciences Drive  
Stony Brook, New York 11790**

(Address of principal executive offices; zip code)

Registrant's telephone number, including area code:

631-240-8800

N/A

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

--Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

--Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

--Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

--Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 8.01. Other Information.**

Applied DNA Sciences, Inc., a Delaware corporation (the “Company”), closed its previously announced underwritten public offering on April 1, 2015 in which 4,011,000 shares of common stock and warrants to purchase up to an aggregate of 1,604,400 shares of common stock were sold to the public at a combined offering price of \$3.00, including 191,000 shares and 76,400 warrants sold pursuant to the partial exercise of the underwriters’ over-allotment option.

The shares of common stock and the warrants are being offered and sold to the public pursuant to the Company’s registration statement on Form S-3 (File No. 333-202432) (the “Registration Statement”), which was declared effective by the Securities and Exchange Commission (the “Commission”) on March 10, 2015, including a base prospectus dated March 10, 2015, and a final prospectus supplement filed with the Commission on March 27, 2015. A copy of the opinion of Norton Rose Fulbright LLP relating to the validity of the securities issued in the offering is filed herewith as Exhibit 5.1 and is hereby incorporated by reference into the Registration Statement.

In furtherance of the offering, on April 1, 2015, the Company and American Stock Transfer & Trust Company, LLC (“AST”) entered into a First Amendment to Warrant Agreement, pursuant to which AST has agreed to act as agent with respect to the Warrants to be issued in the offering. A copy of the First Amendment to Warrant Agreement is filed as Exhibit 4.1 and is incorporated herein by reference.

On April 1, 2015, the Company issued a press release announcing the closing of the public offering and partial exercise of the underwriters’ over-allotment option. A copy of the press release is attached hereto as Exhibit 99.1.

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

*(d) Exhibits*

- 4.1 First Amendment to Warrant Agreement dated April 1, 2015 between Applied DNA Sciences, Inc. and American Stock Transfer & Trust Company, LLC, as warrant agent.
- 5.1 Opinion of Norton Rose Fulbright LLP
- 23.1 Consent of Norton Rose Fulbright LLP (included as Exhibit 5.1 hereto)
- 99.1 Press Release dated April 1, 2015

**SIGNATURE**

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

Date: April 1, 2015 APPLIED DNA SCIENCES,  
INC.

By: /s/ James A. Hayward  
Name: James A. Hayward  
Title: Chief Executive Officer



**EXHIBIT INDEX**

Exhibit No.	Description
4.1	First Amendment to Warrant Agreement dated April 1, 2015 between Applied DNA Sciences, Inc. and American Stock Transfer & Trust Company, LLC, as warrant agent.
5.1	Opinion of Norton Rose Fulbright LLP
23.1	Consent of Norton Rose Fulbright LLP (included as Exhibit 5.1 hereto)
99.1	Press Release dated April 1, 2015

Exhibit 4.1

FIRST AMENDMENT TO WARRANT AGREEMENT

THIS FIRST AMENDMENT TO WARRANT AGREEMENT (this “**Amendment**”), dated as of April 1, 2015, is by and between Applied DNA Sciences, Inc., a Delaware corporation (the “**Company**”), and American Stock Transfer & Trust Company, LLC, a New York limited liability trust company, as Warrant Agent (the “**Warrant Agent**”).

WHEREAS, the Company and the Warrant Agent have previously entered into that certain Warrant Agreement, dated as of November 20, 2014 (the “**Warrant Agreement**”), and the Company and the Warrant Agent now desire to amend the Warrant Agreement on the terms and subject to the conditions set forth herein (with capitalized terms used and not defined in this Amendment having the respective meanings given them in the Warrant Agreement);

WHEREAS, the Company has filed with the Commission a registration statement on Form S-3 (File No. 333-202432) (the “**Shelf Registration Statement**”; and together with the Registration Statement, the “**Registration Statements**”) for the registration under the Securities Act of Common Stock, Warrants and other securities of the Company in an aggregate amount not to exceed \$25,000,000; and

WHEREAS, pursuant to an underwriting agreement, dated March 27, 2015, by and between the Company and Maxim Group, LLC, as representatives of the several underwriters named in Schedule I thereto, and a final prospectus supplement, dated March 27, 2015, filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act (the “**Prospectus Supplement**”; and together with the Prospectus, the “**Prospectuses**”), the Company is engaged in a public offering (the “**Follow-on Offering**”) of shares of Common Stock and Warrants and, in connection therewith, has determined to issue and deliver up to 1,757,200 Warrants (including up to 229,200 Warrants subject to an over-allotment option granted to the underwriters by the Company) to public investors in the Follow-on Offering, each such Warrant evidencing the right of the holder thereof to purchase one share of Common Stock at an exercise price of \$3.50 per share, subject to adjustment as described in the Warrant Agreement; and

WHEREAS, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing to so act, in connection with the issuance, registration, transfer, exchange and exercise of the Warrants to be issued to public investors in the Follow-on Offering; and

WHEREAS, the Company desires to provide for the form and provisions of the Warrants to be issued to public investors in the Follow-on Offering, the terms upon which they shall be issued and exercised, and the respective rights, limitation of rights, and immunities of the Company, the Warrant Agent, and the Holders; and

WHEREAS, all acts and things have been done and performed which are necessary to make the Warrants to be issued to public investors in the Follow-on Offering, when executed on behalf of the Company and countersigned by or on behalf of the Warrant Agent, as provided herein, the valid, binding and legal obligations of the Company, and to authorize the execution and delivery of this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements herein contained, the parties hereto agree as follows:

1. Recitals. The foregoing Recitals are hereby incorporated into and made part of this Amendment.
2. Appointment of Warrant Agent. The Company hereby appoints the Warrant Agent to act as agent for the Company for the Warrants to be issued to public investors in the Follow-on Offering, and the Warrant Agent hereby accepts such appointment and agrees to perform the same in accordance with the terms and conditions set forth in the Warrant Agreement, as amended hereby.
3. Amendments to the Warrant Agreement. The Warrant Agreement is hereby amended as follows:
  - 3.1 Section 3.4 of the Warrant Agreement is hereby amended by inserting immediately following the word "Offering" the words "or Follow-on Offering, as applicable".
  - 3.2 Section 6.4 of the Warrant Agreement is hereby amended by deleting the words "Registration Statement" from the first and second sentences of such Section and substituting in lieu thereof the words "Registration Statements".
  - 3.2 Section 6.4 of the Warrant Agreement is hereby further amended by deleting the word "Prospectus" from the second sentence of such Section and substituting in lieu thereof the word "Prospectuses".
4. Entire Agreement. The terms and conditions of this Amendment shall be incorporated by reference in the Warrant Agreement as though set forth in full in the Warrant Agreement. In the event of any inconsistency between the provisions of this Amendment and any other provision of the Warrant Agreement, the terms and provisions of this Amendment shall govern and control. Except to the extent specifically amended or superseded by the terms of this Amendment, all of the provisions of the Warrant Agreement shall remain in full force and effect to the extent in effect on the date of this Amendment. The Warrant Agreement, as modified by this Amendment, constitutes the complete agreement among the parties and supersedes any prior written or oral agreements, writings, communications or understandings of the parties with respect to the subject matter the Warrant Agreement.
5. Miscellaneous Provisions. The provisions of Section 8 of the Warrant Agreement are hereby incorporated into this Amendment as if set forth fully herein and shall apply *mutatis mutandis*.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

APPLIED DNA SCIENCES,  
INC.

By: /s/ James A. Hayward  
Name: James A. Hayward  
Title: Chief Executive  
Officer

AMERICAN STOCK  
TRANSFER & TRUST  
COMPANY, LLC, as  
Warrant Agent

By: /a/ Michael A. Nespoli  
Name: Michael A. Nespoli  
Title: Executive Director

Signature Page to Amendment to Warrant Agreement by and between Applied DNA Sciences, Inc.

and American Stock Transfer & Trust Company, LLC, as Warrant Agent

Exhibit 5.1

April 1, 2015

Norton Rose Fulbright US LLP  
666 Fifth Avenue, 31st Floor  
New York, New York 10103-3198  
United States

Applied DNA Sciences, Inc. Tel +1 212 318 3000  
50 Health Sciences Drive Fax +1 212 318 3400  
Stony Brook, New York 11790 nortonrosefulbright.com

Ladies and Gentlemen:

We have acted as counsel to Applied DNA Sciences, Inc., a Delaware corporation (the “**Company**”), with respect to certain legal matters in connection with the offering of an aggregate of 3,820,000 shares of common stock, \$.001 par value per share, of the Company (the “**Common Stock**”), plus up to 573,000 shares of Common Stock subject to an over-allotment option granted by the Company to the underwriters (collectively, the “**Shares**”), and warrants to purchase up to 1,528,000 shares of Common Stock, plus additional warrants to purchase up to 229,200 shares of Common Stock subject to an over-allotment option granted by the Company to the underwriters (collectively, the “**Warrants**”) and the shares of Common Stock underlying the Warrants (the “**Warrant Shares**”), pursuant to a prospectus supplement dated March 26, 2015 (the “**Prospectus Supplement**”), supplementing the prospectus dated March 10, 2015 (the “**Base Prospectus**”) that forms part of the Company’s Registration Statement on Form S-3 (File No. 333-202432) (the “**Registration Statement**”), filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”). We understand that the Shares and the Warrants are to be sold to the underwriters for resale to the public as described in the Registration Statement and pursuant to an underwriting agreement, dated March 27, 2015, by and between the Company and Maxim Group, LLC, acting for itself and as representative for the other underwriter named therein (the “**Underwriting Agreement**”). In addition, we understand that the Warrants will be issued pursuant to the Warrant Agreement, dated as of November 20, 2014, between the Company and American Stock Transfer & Trust Company, LLC, as warrant agent, as amended by the First Amendment to Warrant Agreement dated April 1, 2015 (collectively, the “**Warrant Agreement**”).

We have examined (i) the Base Prospectus and the Prospectus Supplement, (ii) the Registration Statement, (iii) the executed Underwriting Agreement, (iv) the executed Warrant Agreement, and (v) such records of the Company, other documents and questions of law as we have considered necessary or appropriate for the purposes of this opinion letter. In our examination of the foregoing documents, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies, and the authenticity of the originals of such latter documents.

Based on the foregoing, and having due regard for such legal considerations as we deem relevant, we are of the opinion that:

the Shares have been duly and validly authorized for issuance, and when issued and delivered in accordance with 1. the terms of the Underwriting Agreement, and upon receipt by the Company of payment of the consideration therefor provided for therein, will be validly issued, fully paid and nonassessable;

Norton Rose Fulbright US LLP is a limited liability partnership registered under the laws of Texas. 68475428.3

Norton Rose Fulbright US LLP, Norton Rose Fulbright LLP, Norton Rose Fulbright Australia, Norton Rose Fulbright Canada LLP and Norton Rose Fulbright South Africa Inc are separate legal entities and all of them are members of Norton Rose Fulbright Verein, a Swiss verein. Norton Rose Fulbright Verein helps coordinate the activities of the members but does not itself provide legal services to clients. Details of each entity, with certain regulatory information, are available at [nortonrosefulbright.com](http://nortonrosefulbright.com).

Applied DNA Sciences, Inc.

April 1, 2015

Page 2

the Warrants have been duly and validly authorized for issuance and, when issued, sold and delivered by the Company in accordance with and in the manner described in the Base Prospectus and the Prospectus Supplement, the Underwriting Agreement and the Warrant Agreement, will be validly issued and will constitute a valid and

2. binding agreement of the Company enforceable against the Company in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, moratorium and similar laws affecting creditors' rights generally and equitable principles of general applicability; and

the Warrant Shares have been duly and validly authorized for issuance and, when issued and sold by the Company upon valid exercise of the Warrants and against receipt of the exercise price therefor, in accordance with and in the

3. manner described in the Registration Statement and the Warrant Agreement, will be validly issued, fully paid and non-assessable.

The foregoing opinions are limited to the laws of the State of New York, the Delaware General Corporation Law (including the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting these laws) and applicable federal laws of the United States of America and we express no opinion as to the effect of the laws of any other jurisdiction, domestic or foreign.

We hereby consent to the references to this firm under the caption "Legal Matters" in the Prospectus Supplement and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed by the Company on the date hereof, which Form 8-K will be incorporated by reference in the Registration Statement. By giving such consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/Norton Rose Fulbright US LLP

Norton Rose Fulbright US LLP

Exhibit 99.1

**Applied DNA Sciences, Inc. Announces Closing of \$12.0 Million Public Offering and Partial Exercise of Over-Allotment Option**

Stony Brook, NY, April 1, 2015 -- Applied DNA Sciences, Inc.(NASDAQ: APDN; APDNW) (Twitter: @APDN), a provider of DNA-based anti-counterfeiting technology supply chain and product authentication solutions, announced the closing of its underwritten public offering of 4,011,000 shares of common stock and warrants to purchase up to an aggregate of 1,604,400 shares of common stock, at a combined offering price of \$3.00, including 191,000 shares and 76,400 warrants sold pursuant to the partial exercise of the underwriters' over-allotment option. The warrants have a per share exercise price of \$3.50, are exercisable immediately, and expire on November 20, 2019. The gross proceeds to the Company from this offering, including the partial exercise of the over-allotment option but before deducting the underwriting discount and commissions and offering expenses, is \$12.0 million.

The Company intends to use the net proceeds from the offering for general corporate purposes, including working capital, capital expenditures, business development and research and development and acquisitions of new technologies or businesses.

The underwriters still have a 45 day option to purchase up to an additional 382,000 shares of common stock and 152,800 warrants, to cover additional over-allotments, if any.

Maxim Group LLC acted as the Sole Book Running Manager and The Benchmark Company acted as Co-Manager in the offering.

A registration statement on Form S-3 relating to these securities was declared effective by the Securities and Exchange Commission on March 10, 2015. The offering of these securities was made only by means of a written prospectus and prospectus supplement forming part of the registration statement. Copies of the final prospectus relating to this offering may be obtained from Maxim Group LLC, 405 Lexington Avenue, 2nd Floor, New York, NY 10174 or via telephone at 212-895-3745. The final prospectus relating to the offering is also available on the SEC's website at <http://www.sec.gov>.

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



## **About Applied DNA Sciences**

We make life real and safe by providing botanical-DNA based security and authentication solutions and services that can help protect products, brands, entire supply chains, and intellectual property of companies, governments and consumers from theft, counterfeiting, fraud and diversion. SigNature® DNA describes the platform ingredient that is at the heart of all of our security and authentication solutions. SigNature DNA is at the core of a family of uncopyable products such as DNAnet®, our anti-theft product, SigNature® T, targeted toward textiles, and digitalDNA®, providing powerful track and trace. All provide a forensic chain of evidence and can be used to prosecute perpetrators.

Applied DNA Sciences common stock is listed on NASDAQ under the symbol APDN, and its warrants are listed under the symbol APDNW.

## **Forward Looking Statements**

The statements made by APDN in this press release may be “forward-looking” in nature within the meaning of the Private Securities Litigation Act of 1995. Forward-looking statements describe APDN’s future plans, projections, strategies and expectations, and are based on assumptions and involve a number of risks and uncertainties, many of which are beyond the control of APDN. Actual results could differ materially from those projected due to our short operating history, limited financial resources, limited market acceptance, market competition and various other factors detailed from time to time in APDN’s SEC reports and filings, including our Annual Report on Form 10-K filed on December 15, 2014, as amended on March 6, 2015, and our subsequent quarterly report on Form 10-Q filed on February 9, 2015 which are available at [www.sec.gov](http://www.sec.gov). APDN undertakes no obligation to update publicly any forward-looking statements to reflect new information, events or circumstances after the date hereof to reflect the occurrence of unanticipated events, unless otherwise required by law.

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