
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): November 13, 2015

XENETIC BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

<u>Nevada</u> (State or other jurisdiction of incorporation)	<u>333-178082</u> (Commission File Number)	<u>45-2952962</u> (I.R.S. Employer Identification No.)
<u>99 Hayden Avenue, Suite 230, Lexington, MA</u> (Address of principal executive offices)		<u>02421</u> (Zip Code)

Registrant's telephone number, including area code 781-778-7720

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

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

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 1.01. Entry into a Material Definitive Agreement

IP Asset Purchase Agreement

On November 13, 2015, Xenetic Biosciences, Inc. (the “Company” or “Xenetic”) and its subsidiary, Lipoxen Technologies, LTD, a U.K. corporation (“Lipoxen” and together with the Company, “Buyers”), entered into an Asset Purchase Agreement (the “Asset Purchase Agreement”) with AS Kevelt, an Estonian company (“Kevelt”) and OJSC Pharmsynthez, a Russian pharmaceutical company and parent of Kevelt (“Pharmsynthez, and together with Kevelt, “Sellers”). Pursuant to the Asset Purchase Agreement:

- Kevelt will transfer to Lipoxen certain intellectual property rights with respect to the immunomodulator product Virexxa™ held by Kevelt and Sellers will grant to Buyers the worldwide right to develop, market and license Virexxa (the “Virexxa Assignment”) for all uses except for “Excluded Uses” in Russia, the Commonwealth of Independent States and certain other countries (the “Retained Territory”). Excluded Uses consist of the current product label of Neovir/Primavir in the Retained Territory;
- Sellers and the Company will enter into a Transition Services and Resupply Agreement pursuant to which Sellers will supply the Company with the Virexxa Molecule;
- Dmitry Genkin and Kirill Surkhov, shareholders and founders of Pharmsynthez (the “Inventors”), will assign USPTO provisional patent application #62076546 entitled “Method for Treatment of Primary Hormone Resistant Endometrial and Breast Cancers” to Lipoxen (the “HRE Assignment”) and the Company will issue to the Inventors an aggregate of 11 million shares of its common stock in exchange for the HRE Assignment;
- Pharmsynthez will loan \$3.5 million to the Company in tranches as set forth below (the “New Loan”) and the Company will issue to Pharmsynthez one or more 10% senior secured convertible notes in an aggregate amount of \$3.5 million (the “New Note”) and one or more warrants to purchase up to an aggregate of 11,666,667 shares of Xenetic common stock (the “New Warrant”);
- The Company will issue 100,500,000 shares of its common stock to Pharmsynthez (the “Pharmsynthez Shares”);
- The Company is required to use commercially reasonable efforts to secure additional funding of at least \$15 million (the “Capital Raise”) and list its shares on a U.S. national exchange (the “Listing Event”);
- Pharmsynthez will purchase in the Capital Raise, or in a private placement concurrent with the Capital Raise, \$6.5 million worth of Xenetic common stock at the Capital Raise price per share (the “Pharmsynthez Purchase”);
- Pharmsynthez and the Company will amend and restate that certain \$3.0 million 10% senior secured convertible note dated July 1, 2015 (the “Original Note”) issued to Pharmsynthez to extend the maturity date thereof from July 1, 2016 to October 1, 2016 (the “Amended and Restated Note” and, together with the New Note, the “Notes”);
- Pharmsynthez and the Company will amend that certain common stock purchase warrant to purchase 10 million shares of Xenetic Common Stock issued to Pharmsynthez on July 1, 2015 (the “Original Warrant”) to extend the initial exercise date thereof from January 1, 2016 to March 1, 2016 (the “Amended and Restated Warrant” and, together with the New Warrant, the “Warrants”);
- The Company and Synbio Limited Liability Company will amend that certain loan agreement, dated as of May 10, 2011, to extend the maturity date to April 30, 2016.
- The Company will issue to certain members of management of Pharmsynthez warrants to purchase up to an aggregate of 5 million shares of Xenetic common stock (the “Management Warrants”);
- In the event that the New Note remains outstanding at April 30, 2015, the Company will issue to Pharmsynthez an additional warrant having the same terms as the New Warrant.
- At the closing of the Capital Raise, Pharmsynthez will convert the Notes into shares of Xenetic common stock and will exercise the Warrants, all in accordance with the terms set forth therein;
- The Company will seek an amendment to its Articles of Incorporation to effect a not less than 1:10 reverse stock split.
- In the event following the Capital Raise and the conversion of the Notes and exercise of the Warrants, Pharmsynthez and its affiliates do not own 72% of the outstanding shares of Xenetic common stock (such 72% calculation being computed after the Pharmsynthez and affiliates investments but before giving effect to any portion of the Capital Raise that is sold to the public and not including the Inventor Shares or shares of common stock held by certain other members of the Company’s management), then the Company will issue to Pharmsynthez such number of shares of Xenetic common stock, such that after the issuance, it will own 72% in accordance with the aforesaid calculation (the “Make Whole Shares”); and
- In the event that the Company is unable to complete the Listing Event on or before March 31, 2016, then, Pharmsynthez will loan to Xenetic an amount equal to up to the Pharmsynthez Purchase at such times and in such increments as requested by Xenetic upon five (5) business days written notice.

The New Loan will be funded as follows:

- Within five (5) business days following the execution of the Agreement Pharmsynthez will loan to the Company \$1 million;
- Within five (5) business days of written notice from Xenetic to Pharmsynthez, provided such notice will be delivered on or after December 1, 2015 but no later than December 31, 2015, Pharmsynthez will loan to the Company an additional \$1 million;
- Within five (5) business days of written notice from Xenetic to Pharmsynthez, provided that such notice will be delivered on or after November 1, 2015, Parent will loan to Xenetic an additional \$500,000.
- Within five (5) business days of written notice from Xenetic to Pharmsynthez, provided such notice will be delivered on or after February 1, 2016 but no later than February 28, 2016, Pharmsynthez will loan to the Company an additional \$1 million; and

Sellers will retain Virexxa intellectual property rights with respect to the Excluded Uses. Additionally, no Seller contracts with respect to Virexxa will be assigned to Buyers (including those relating to Permitted Uses), provided that Seller agrees to terminate those contracts relating to Permitted Uses upon the request of Buyer. Finally, Pharmsynthez and the Company will amend and restate the following documents to cover the issuance of the Pharmsynthez Shares, the New Warrant and the New Note, the shares underlying the New Warrant and the New Note and the obligations created thereunder:

- That certain Securities Purchase Agreement, dated June 9, 2015 by and between Pharmsynthez and Xenetic, pursuant to which the Pharmsynthez purchased the Original Note and was issued the Original Warrant;
- That certain Security Agreement, dated as of July 1, 2015 by and among the Company, all of its subsidiaries and Pharmsynthez;
- That certain Registration Rights Agreement, dated as of July 1, 2015 by and between Pharmsynthez and Xenetic, pursuant to which Pharmsynthez was granted certain registration rights with respect to the shares of common stock underlying the Original Note and the Original Warrant; and
- That certain Subsidiary Guarantee, dated July 1, 2015, by and among the subsidiaries of the Company and Pharmsynthez, pursuant to which the subsidiaries guaranteed the obligations of the Company under the Original Note and the Securities Purchase Agreement.

Further, Xenetic shall provide to each of Scott Maguire (its Chief Executive Officer) and Flagship Consulting, Inc. (an affiliate of the Company's Chief Financial Officer) the right to convert all of their accrued, unpaid compensation to common stock of Xenetic (the "Deferred Salary") on pro rata terms to the conversion rights with respect to the New Note.

The Asset Purchase Agreement contains customary indemnification provisions. The transactions contemplated by the Asset Purchase Agreement are subject to customary closing conditions, including the approval of an amendment to the Company's Articles of Incorporation by the stockholders of the Company. The foregoing is a brief summary of the terms of the Asset Purchase Agreement and the aforementioned documents. It is not a complete description of all their terms of those agreements or other related documents in this transaction. The full text of the key documents related to this transaction are attached hereto as Exhibits 10.1 through 10.10, should be reviewed in their entirety for further information.

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

The information set forth under Item 1.01 regarding the New Note is incorporated herein by reference.

Item 3.02. Unregistered Sales of Equity Securities

Securities Sold

As set forth in Item 1.01 above, pursuant to the transactions contemplated by the Asset Purchase Agreement, the Company is required to issue the Pharmsynthez Shares, the New Note and the New Warrant to Pharmsynthez and 11 million shares of Company common stock to the Inventors. Further, the Company is required to sell to Pharmsynthez \$6.5 million of shares of common stock pursuant to the Pharmsynthez Purchase. Moreover, the Company may be required to issue to Pharmsynthez the Make Whole Shares. Additionally, the Company will issue the Management Warrants to certain members of management of Pharmsynthez. Finally, each of Maguire and Flagship Consulting, Inc. has the right to convert all of their Deferred Salary or compensation to shares of Xenetic common stock on pro rata terms to the conversion rights with respect to the New Note.

Consideration

The Pharmsynthez Shares, the New Note, New Warrant, Make-Whole Shares and the Management Warrants will be issued in consideration for the Virexxa Assignment and the New Loan. The shares of common stock issued pursuant to the Pharmsynthez Purchase will be issued in consideration for \$6.5 million.

Exemption from Registration

The Company is relying on the exemption from registration contained in Section 4(2) of the Securities Act with respect to all of the aforementioned issuances.

Terms of Conversion or Exercise

The New Note is convertible into shares of Company common stock at any time at a conversion price of \$0.15 per share (subject to usual and customary adjustments). The New Warrant may be exercised at any time on or after March 1, 2016 through the five-year anniversary of the issuance thereof. The New Warrant allows Pharmsynthez to purchase up to 11,666,667 shares of Company common stock at a price per share equal to the lesser of \$0.20 and 120% of the Capital Raise price (subject to usual and customary adjustments) and includes a standard cashless exercise provision. The Management Warrants may be exercised at any time on or after March 31, 2016 through the five-year anniversary of the issuance thereof. The New Warrant allows the holders thereof to purchase up to an aggregate of 5 million shares of Company common stock at a price per share equal to \$0.42 (subject to usual and customary adjustments) and includes a standard cashless exercise provision.

Item 8.01. Other Events

On November 16, 2015, the Company issued a news release announcing it entering into the Asset Purchase Agreement. A copy of the news release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	Form of Asset Purchase Agreement, dated as of November 13, 2015, by and among Xenetic Biosciences, Inc., Lipoxen Technologies, LTD, a U.K. corporation, AS Kevelt, an Estonian company and OJSC Pharmsynthez
10.2	Form of Ten Percent Senior Secured Convertible Promissory Note
10.3	Form of Common Stock Purchase Warrant
10.4	Form of Management Common Stock Purchase Warrant
10.5	Form of Amended and Restated Ten Percent Senior Secured Convertible Promissory Note
10.6	Form of Amended and Restated Common Stock Purchase Warrant
10.7	Form of Amendment to Securities Purchase Agreement
10.8	Form of Amendment to Registration Rights Agreement
10.9	Form of Amendment to Security Agreement
10.10	Form of Amendment to Subsidiary Guarantee
10.11	Form of Transition Services and Resupply Agreement
99.1	News Release issued by Xenetic Biosciences, Inc. on November 16, 2015.

Safe Harbor Statement

Except for the historical matters contained herein, statements in this current report, and the information incorporated by reference herein, are forward-looking and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that forward-looking statements involve risks and uncertainties that may affect the business and prospects of the Company, including, without limitation: risks related to the Company's business strategy, and marketing programs; risks related to the Company's ability to operate successfully in the current challenging economic environment; risks related to the Company's efforts to strengthen its name recognition and concept; and other risks and uncertainties that may cause results to differ materially from those set forth in the forward-looking statements. Past performance may not be indicative of future results. Although the Company believes the expectations reflected in such forward-looking statements are based upon reasonable assumptions, there can be no assurance that its expectations will be realized. In addition to the risks and uncertainties set forth above, investors should consider the risks and uncertainties discussed in the Company's filings with the Securities and Exchange Commission, including, without limitation, the risks and uncertainties discussed under the heading "Risk Factors" in such filings. The Company does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

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 thereunto duly authorized.

XENETIC BIOSCIENCES, INC.
(registrant)

DATE November 16, 2015

BY /s/ Michael Scott Maguire
Michael Scott Maguire
Chief Executive Officer

FORM OF
ASSET PURCHASE AGREEMENT

among

**AS KEVELT,
OJSC PHARMSYNTHEZ**

and

XENETIC BIOSCIENCES, INC.
and
LIPOXEN TECHNOLOGIES, LTD.
dated as of

NOVEMBER 13, 2015

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ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this “**Agreement**”), dated as of November 13, 2015, is entered into among AS KEVELT, an Estonian company (“**Seller**”), OJSC PHARMSYNTHEZ, a Russian pharmaceutical company and parent of Seller (“**Parent**”), and XENETIC BIOSCIENCES, INC., a Nevada corporation (“**Xenetic**”) and LIPOXEN TECHNOLOGIES, LTD., a U.K. corporation (“**Lipoxen**” each of Xenetic and Lipoxen are hereinafter sometimes individually referred to as a “**Buyer**” and collectively referred to as “**Buyers**”).

RECITALS

WHEREAS, Seller holds certain intellectual property rights with respect to the immunomodulator product Virexxa® (Oxodihydroacridinylacetate sodium), as more fully set forth on Exhibit A hereto (“Virexxa”);

WHEREAS, Seller uses the Purchased Assets (as defined below) to develop Virexxa for, among other indications, the treatment of certain cancers, and use in connection with immune modulation or interferon, and the Buyer shall have the right to develop, market and license Virexxa for any Permitted Uses (as defined below); and

WHEREAS, Seller wishes to sell and assign to Buyers, and Buyers wish to purchase and assume from Seller, all of the Purchased Assets, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

Definitions

The following terms have the meanings specified or referred to in this Article I:

“**1934 Act Reports**” means those Annual Reports (on Form 10-K), Quarterly Reports (on Form 10-Q) and Current Reports (on Form 8-K) filed by Xenetic pursuant to its obligations as a reporting company under the Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Action**” means any claim, action, cause of action, demand, lawsuit, arbitration, audit, notice of violation, proceeding, litigation, citation, summons or subpoena of any nature, civil, criminal, administrative, regulatory or otherwise, whether at law or in equity.

“**Additional Convertible Note**” means that certain convertible note or notes in the form attached hereto as Exhibit B, which shall be secured by the Purchased Assets, and which shall be payable in instalments according to the payment schedule set forth as an exhibit to the Securities Purchase Agreement Amendment.

“**Additional Loan Amount**” has the meaning set forth in **Section 6.13(a)**.

“**Additional Purchase Amount**” means (i) in the event of a Capital Raise, such number of shares of Xenetic’s common stock calculated as follows: $X = (Y-Z)/W$; where X is the number of shares of Xenetic’s common stock to be purchased; Y is \$10 million; Z is the Additional Loan Amount; and W is the Additional Purchase Price Per Share of Xenetic’s common stock or (ii) in the event of a loan in lieu of a Capital Raise, an aggregate principal amount equal to \$10 million minus the sum of the Additional Loan Amount and the amount of the Further Loan.

“**Additional Purchase Price Per Share**” means the offering price per share of Xenetic’s common stock in the Capital Raise.

“**Additional Warrant**” means that certain warrant or warrants to purchase up to 11,666,667 shares of Xenetic common stock, in the form attached hereto as Exhibit C.

“**Affiliate**” of a Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person. The term “control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise. For the avoidance of doubt, SynBio and FDS Pharma ASS are Affiliates of Sellers for purposes of this Agreement.

“**Agreement**” has the meaning set forth in the preamble.

“**Allocation Schedule**” has the meaning set forth in **Section 2.06**.

“**Assigned Contracts**” shall mean those contracts related to Virexxa set forth on Schedule 2.01 and which are being specifically assigned by Seller to Buyers at Closing.

“**Assignment and Assumption Agreement**” has the meaning set forth in **Section 3.02(a)(ii)**.

“**Assumed Liabilities**” has the meaning set forth in **Section 2.03**.

“**Bill of Sale**” has the meaning set forth in **Section 3.02(a)(i)**.

“**Books and Records**” means all books and records, including, but not limited to, books of account, ledgers and general, financial and accounting records, machinery and equipment maintenance files, customer lists, customer purchasing histories, price lists, distribution lists, supplier lists, production data, quality control records and procedures, customer complaints and inquiry files, research and development files, records and data (including all correspondence with any Governmental Authority), sales material and records (including pricing history, total sales, terms and conditions of sale, sales and pricing policies and practices), strategic plans, marketing and promotional surveys, material and research and intellectual property files relating to the Intellectual Property and the Intellectual Property Licenses.

“**Business Day**” means any day except Saturday, Sunday or any other day on which commercial banks located in the State of Nevada, Estonia or Russia are authorized or required by Law to be closed for business.

“**Buyer**” and “**Buyers**” have the meanings set forth in the preamble.

“**Buyer Intellectual Property**” means all of the following and similar intangible property and related proprietary rights, interests and protections, however arising of **Buyers** and, pursuant to the Laws of any jurisdiction throughout the world that was invented, created, existing, filed, prosecuted and/or issued to **Buyers** in any country, including any: (a) trademarks, service marks, trade names, brand names, pre-clinical and clinical product names, logos, trade dress and other proprietary indicia of goods and services, whether registered, unregistered or arising by Law, and all registrations and applications for registration of such trademarks, including intent-to-use applications, and all issuances, extensions and renewals of such registrations and applications; (b) internet domain names, whether or not trademarks, registered in any generic top level domain by any authorized private registrar or Governmental Authority; (c) original works of authorship in any medium of expression, whether or not published, all copyrights (whether registered, unregistered or arising by Law), all registrations and applications for registration of such copyrights, and all issuances, extensions and renewals of such registrations and applications; (d) confidential information, formulas, designs, devices, technology, know-how, research and development, inventions, methods, processes, compositions and other trade secrets, whether or not patentable; (e) patented and patentable designs and inventions, all design, plant and utility patents, letters patent, utility models, pending patent applications and provisional applications and all issuances, divisions, continuations, continuations-in-part, reissues, extensions, re-examinations and renewals of such patents and all patent applications filed or in process and all data and research associated therewith; (f) all investigational new drug applications (and work in preparation for submission of the same), dossiers, files and data related to product candidates under development by the Buyers, and (g) all studies (clinical and otherwise) and all applications for approval for sale in any country of any product candidate.

“**Buyers’ Basket Exclusions**” has the meaning set forth in **Section 8.04(a)**.

“**Buyers’ Closing Certificate**” has the meaning set forth in **Section 7.03(f)**.

“**Buyers’ Indemnitees**” has the meaning set forth in **Section 8.02**.

“**Buyer Insurance Policies**” has the meaning set forth in **Section 5.10**.

“**Capital Raise**” means the closing of a public and/or private offering of at least \$15 million of Xenetic’s common stock pursuant to the Securities Act.

“**Closing**” has the meaning set forth in **Section 3.01**.

“**Closing Date**” has the meaning set forth in **Section 3.01**.

“**Code**” means the Internal Revenue Code of 1986, as amended.

“**Contracts**” means all contracts, leases, deeds, mortgages, licenses, instruments, notes, commitments, undertakings, indentures, joint ventures and all other agreements, commitments and legally binding arrangements, whether written or oral.

“**CRO Contracts**” means those Contracts with contract research organizations set forth on **Section 2.02(c)** of the Disclosure Schedules.

“**Current Convertible Note**” means that certain convertible note attached hereto as Exhibit D.

“**Current Warrant**” means that certain warrant to purchase shares of Xenetic common stock attached hereto as Exhibit E.

“**Direct Claim**” has the meaning set forth in **Section 8.05(c)**.

“**Disclosure Schedules**” means the Disclosure Schedules delivered by Seller and Buyers concurrently with the execution and delivery of this Agreement.

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

“**Encumbrance**” means any charge, community property interest, pledge, condition, equitable interest, lien (statutory or other), option, license, security interest, mortgage, easement, encroachment, right of way, right of first refusal, or restriction of any kind, including any restriction on use, voting, transfer, receipt of income or exercise of any other attribute of ownership.

“**Environmental Claim**” means any Action, Governmental Order, lien, fine, penalty, or, as to each, any settlement or judgment arising therefrom, by or from any Person alleging liability of whatever kind or nature (including liability or responsibility for the costs of enforcement proceedings, investigations, clean-up, governmental response, removal or remediation, natural resources damages, property damages, personal injuries, medical monitoring, penalties, contribution, indemnification and injunctive relief) arising out of, based on or resulting from: (a) the presence, Release of, or exposure to, any Hazardous Materials; or (b) any actual or alleged non-compliance with any Environmental Law or term or condition of any Environmental Permit.

“**Environmental Law**” means any applicable Law, and any Governmental Order or binding agreement with any Governmental Authority: (a) relating to pollution (or the clean-up thereof) or the protection of natural resources, endangered or threatened species, human health or safety, or the environment (including ambient air, soil, surface water or groundwater, or subsurface strata); or (b) concerning the presence of, exposure to, or the management, manufacture, use, containment, storage, recycling, reclamation, reuse, treatment, generation, discharge, transportation, processing, production, disposal or remediation of any Hazardous Materials. The term “Environmental Law” includes, without limitation, the following (including their implementing regulations and any state analogs): the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. §§ 9601 et seq.; the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §§ 6901 et seq.; the Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, 33 U.S.C. §§ 1251 et seq.; the Toxic Substances Control Act of 1976, as amended, 15 U.S.C. §§ 2601 et seq.; the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.; the Clean Air Act of 1966, as amended by the Clean Air Act Amendments of 1990, 42 U.S.C. §§ 7401 et seq.; and the Occupational Safety and Health Act of 1970, as amended, 29 U.S.C. §§ 651 et seq.

“**Environmental Notice**” means any written directive, request for information, notice of violation or infraction, or other notice respecting any Environmental Claim relating to actual or alleged non-compliance with or liability pursuant to any Environmental Law or any term or condition of any Environmental Permit.

“**Environmental Permit**” means any Permit, letter, clearance, consent, waiver, closure, exemption, decision or other action required under or issued, granted, given, authorized by or made pursuant to Environmental Law.

“**Excluded Assets**” has the meaning set forth in **Section 2.02**.

“**Excluded Liabilities**” has the meaning set forth in **Section 2.04**.

“**Excluded Uses**” shall mean the use of Virexxa in the Retained Territory for those indications set forth on Exhibit K.

“**Further Loan**” has the meaning set forth in **Section 6.12**.

“**GAAP**” means United States generally accepted accounting principles in effect from time to time.

“**Genkin/Surkov IP Assignment**” means that certain Intellectual Property Assignment by and among Dimitry Genkin and Kirill Surkov on the one hand and Buyers on the other hand, in the form attached hereto as Exhibit J.

“**Governmental Authority**” means any federal, state, local or foreign government or political subdivision thereof, or any agency or instrumentality of such government or political subdivision, or any self-regulated organization or other non-governmental regulatory authority or quasi-governmental authority (to the extent that the rules, regulations or orders of such organization or authority have the force of Law), or any arbitrator, court or tribunal of competent jurisdiction.

“**Governmental Order**” means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

“**Hazardous Materials**” means: (a) any material, substance, chemical, waste, product, derivative, compound, mixture, solid, liquid, mineral or gas, in each case, whether naturally occurring or manmade, that is hazardous, acutely hazardous, toxic, or words of similar import or regulatory effect under any Environmental Law; and (b) any petroleum or petroleum-derived products, radon, radioactive materials or wastes, asbestos in any form, lead or lead-containing materials, urea formaldehyde foam insulation and polychlorinated biphenyls.

“**Hormone Resistant Provisional Patent Application**” means the USPTO provisional patent application #62076546 entitled “Method for Treatment of Primary Hormone Resistant Endometrial and Breast Cancers” and International Patent Application No. PCT/EP2015/075990 and all patents, divisions, reissues, continuations, continuations-in-part, and any extensions thereof and rights of priority therein, including the right to sue for past infringement and to any such recovery.

“**Indemnified Party**” has the meaning set forth in **Section 8.05**.

“**Indemnifying Party**” has the meaning set forth in **Section 8.05**.

“**Initial Funding Tranche**” has the meaning set forth in **Section 6.13**.

“**Insurance Policies**” has the meaning set forth in **Section 4.08**.

“**Intellectual Property**” means all of the following and similar intangible property and related proprietary rights, interests and protections, however arising of **Seller** and its Affiliates, pursuant to the Laws of any jurisdiction throughout the world that was invented, created, existing, filed, prosecuted and/or issued to **Seller** in any country with respect to Virexxa or directly or indirectly related to Virexxa, with respect to all Permitted Uses, including any: (a) trademarks, service marks, trade names, brand names, pre-clinical and clinical product names, logos, trade dress and other proprietary indicia of goods and services, whether registered, unregistered or arising by Law, and all registrations and applications for registration of such trademarks, including intent-to-use applications, and all issuances, extensions and renewals of such registrations and applications; (b) internet domain names, whether or not trademarks, registered in any generic top level domain by any authorized private registrar or Governmental Authority; (c) original works of authorship in any medium of expression, whether or not published, all copyrights (whether registered, unregistered or arising by Law), all registrations and applications for registration of such copyrights, and all issuances, extensions and renewals of such registrations and applications; (d) confidential information, formulas, designs, devices, technology, know-how, research and development, inventions, methods, processes, compositions and other trade secrets, whether or not patentable; (e) patented and patentable designs and inventions, all design, plant and utility patents, letters patent, utility models, pending patent applications and provisional applications and all issuances, divisions, continuations, continuations-in-part, reissues, extensions, re-examinations and renewals of such patents and all patent applications filed or in process and all data and research associated therewith; (f) all investigational new drug applications (and work in preparation for submission of the same), dossiers, files and data related to Virexxa for any Permitted Use, and (g) all studies (clinical and otherwise) and all applications for approval for sale in any country of Virexxa for any Permitted Use.

“**Intellectual Property Assignments**” has the meaning set forth in **Section 3.02(a)(iii)**.

“**Intellectual Property Licenses**” means all licenses, sublicenses and other agreements by or through which other Persons, including Seller’s Affiliates, grant Seller exclusive or non-exclusive rights or interests in or to any Purchased Assets.

“**Intellectual Property Registrations**” means all Purchased Assets that are subject to any issuance, registration, application or other filing by, to or with any Governmental Authority or authorized private registrar in any jurisdiction, including registered trademarks, domain names, service marks, and copyrights, issued and reissued patents, Supplementary Protection Certificate or the like, and pending applications for any of the foregoing.

“**Knowledge of Seller or Seller’s Knowledge**” or any other similar knowledge qualification, means the actual knowledge of any of Dmitry Genkin, Peter Kruglyakov, Allan Ahtloo, Anna Gavrilovic, Srdjan Gavrilovic, Sergei Avtushenko, Kirill Surkov, Konstantin Zakharov, Laura Douglass and Michelle Welborn.

“**Knowledge of Buyers or Buyers’ Knowledge**” or any other similar knowledge qualification, means the actual knowledge of Scott Maguire.

“**Law**” means any statute, law, ordinance, regulation, rule, code, order, constitution, treaty, common law, judgment, decree, other requirement or rule of law of any Governmental Authority.

“**Liabilities**” means liabilities, obligations or commitments of any nature whatsoever, asserted or un-asserted, known or unknown, absolute or contingent, accrued or un-accrued, matured or un-matured or otherwise.

“**Losses**” means foreseeable and reasonable losses, damages, liabilities, deficiencies, Actions, judgments, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys’ fees and the cost of enforcing any right to indemnification hereunder and the cost of pursuing any insurance providers; *provided, however*, that “Losses” shall not include diminution in value, incidental, consequential or punitive damages, except in the case of fraud or to the extent actually awarded to a Governmental Authority or other third party.

“**Management Warrants**” means those certain warrants to purchase shares of Xenetic’s common stock to be issued to members of Seller’s management, in the form attached hereto as Exhibit F.

“**Material Adverse Effect**” means any event, occurrence, fact, condition or change that is, or could reasonably be expected to become, individually or in the aggregate, materially adverse to (i) the Purchased Assets or contemplated use thereof by Buyers or their designees, in the case of the Seller or (ii) the business, prospects, management, financial position, stockholders’ equity or results of operations of Xenetic and its subsidiaries, taken as one entity, in the case of the Buyers.

“**Material Contracts**” has the meaning set forth in **Section 4.04(a)**.

“**Material Suppliers**” has the meaning set forth in **Section 4.07**.

“**Outside Date**” shall be the date that is the later of April 30, 2016 or 180 days following the date of full execution and delivery of this Agreement.

“**Parent**” has the meaning set forth in the preamble.

“**Parent New Shares**” shall have the meaning set forth in **Section 2.05(a)**

“**Permits**” means all permits, licenses, franchises, approvals, authorizations, registrations, certificates, variances and similar rights obtained, or required to be obtained, from Governmental Authorities

“**Permitted Encumbrances**” has the meaning set forth in **Section 4.05(a)**.

“**Permitted Uses**” shall mean the use of Virexxa and the Intellectual Property for the treatment of all diseases and conditions other than the Excluded Uses. Permitted Uses shall include but not be limited to the treatment of cancer indications and the use of the Intellectual Property as an immune modulator or in association with interferon.

“**Person**” means an individual, corporation, partnership, joint venture, limited liability company, Governmental Authority, unincorporated organization, trust, association or other entity.

“**Pre-Closing CRO Contracts Expenses**” has the meaning set forth in **Section 2.08(b)**.

“**Pre-Closing Retained Virexxa Contracts Expenses**” has the meaning set forth in **Section 2.08(c)**.

“**Purchase Price**” has the meaning set forth in **Section 2.05**.

“**Purchased Assets**” means all Intellectual Property and other assets of Seller being purchased from Seller hereunder that are set forth in Section 2.01 of the Disclosure Schedules.

“**Readout**” shall mean with respect to the Phase II clinical trial for Virexxa, the audited clinical data for a patient in the Phase II clinical trial.

“**Registration Rights Agreement Amendment**” shall mean an amendment to that certain Registration Rights Agreement, dated July 1, 2015, by and between Buyer and Seller in the form attached hereto as an exhibit to this Agreement.

“**Representative**” means, with respect to any Person, any and all directors, officers, employees, consultants, financial advisors, counsel, accountants and other agents of such Person.

“**Restricted Business**” means any business that involves researching, developing, manufacturing, distributing, offering for sale, selling, importing, exporting or supplying Virexxa (also known as Oxodihydroacridinylacetate sodium (and further known as sodium cidanomod, Neovir, Camedon and Primavir)) for any Permitted Use, or any other molecule, compound or substance that has a structural similarity to the same or which functions in a similar manner when used for the treatment of cancer.

“**Restricted Period**” has the meaning set forth in **Section 6.06(a)**.

“**Retained Territory**” shall mean Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Uzbekistan, Ukraine and Mongolia.

“**Retained Virexxa Contracts**” shall mean those contracts related to Virexxa for any Permitted Use to which Seller or one of its Affiliates is a party and which are not being assigned to Buyers pursuant to this Agreement, and which are listed on **Section 2.02(c)** of the Disclosure Schedules.

“**Revised Current Convertible Note**” has the meaning set forth in **Section 2.05(a)**.

“**Revised Current Warrant**” has the meaning set forth in **Section 2.05(a)**.

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

“**Security Agreements**” means a Security Agreement and Intellectual Property Security Agreement covering the pledge of the Purchased Assets by Buyers in favor of Seller as security for the Additional Convertible Note.

“**Securities Purchase Agreement Amendment**” shall mean an amendment to that certain Securities Purchase Agreement, dated June 9, 2015, by and between Buyer and Seller in the form attached hereto as an exhibit to this Agreement.

“**Seller**” has the meaning set forth in the preamble.

“**Seller Basket Exclusions**” has the meaning set forth in **Section 8.04(b)**

“**Seller Closing Certificate**” has the meaning set forth in **Section 7.02(g)**.

“**Seller Indemnitees**” has the meaning set forth in **Section 8.03**

“**Stock Condition**” shall mean the effective amendment to Xenetic’s Articles of Incorporation prior to the Closing Date to authorize the issuance of up to 1.5 billion shares of its common stock (before giving effect to forward or reverse splits following the date of this Agreement) and to effect a not less than 1:10 reverse stock split.

“**Subsidiary Guarantee Amendment**” shall mean an amendment to the Subsidiary Guarantee dated July 1, 2015, by and between Buyer and Seller in the form attached hereto as an exhibit to this Agreement.

“**SynBio**” shall mean SynBio Limited Liability Company, a legal entity, organized and existing under the laws of the Russian Federation, located at: 119333, Russian Federation, Moscow, Leninsky Avenue, 55/1, bld. 2.

“**SynBio Amendment**” shall mean the amendments to the loan agreements between SynBio and Xenetic Biosciences LLC, UK (formerly Lipoxen PLC, UK), dated May 10, 2011 and October 24, 2011.

“**Taxes**” means all federal, state, local, foreign and other income, gross receipts, sales, use, production, ad valorem, transfer, documentary, franchise, registration, profits, license, lease, service, service use, withholding, payroll, employment, unemployment, estimated, excise, severance, environmental, stamp, occupation, premium, property (real or personal), real property gains, windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatsoever, together with any interest, additions or penalties with respect thereto and any interest in respect of such additions or penalties.

“**Tax Return**” means any return, declaration, report, claim for refund, information return or statement or other document relating to Taxes, including any schedule or attachment thereto, and including any amendment thereof.

“**Territory**” means the United States, Europe and Asia.

“**Third Party Claim**” has the meaning set forth in **Section 8.05(a)**.

“**Transaction Documents**” means this Agreement, the Bill of Sale, the Assignment and Assumption Agreement, Intellectual Property Assignments, the Transition Services and Resupply Agreement, the Additional Convertible Note, the Additional Warrant, the Revised Current Note, the Revised Current Warrant, the SynBio Amendment, the Securities Purchase Agreement Amendment, the Subsidiary Guarantee Amendment, the Security Agreements, the Registration Rights Agreement Amendment and the other agreements, instruments and documents required to be delivered at the Closing.

“**Transition Services and Resupply Agreement**” has the meaning set forth in **Section 3.02(a)(iv)**.

“**Virexxa**” shall have the meaning set forth in the Recitals hereof.

“**Virexxa Phase II Trial Cost**” shall mean the cost to Xenetic and its subsidiaries as computed on the accrual method of accounting for the fees, costs and expenses associated with conducting the Phase II clinical trials for Virexxa (assuming all costs, fees and expenses are expensed in the month incurred and are not capitalized).

ARTICLE II

Purchase and Sale

Section 2.01. Purchased Assets Schedule. Subject to the terms and conditions set forth herein, at the Closing, Seller shall sell, assign, transfer, convey and deliver to Buyers, through one or more of Seller’s affiliates, and Buyers shall purchase from Seller, through one or more of Seller’s affiliates, free and clear of any Encumbrances other than Permitted Encumbrances, all of Seller’s right, title and interest in, to and under all of the Intellectual Property of every kind and nature which relate to, or are used or held for use in connection with, the development of Virexxa for all Permitted Uses, with the Purchased Assets as set forth in Section 2.01 of the Disclosure Schedules (collectively, the “**Purchased Assets**”). Buyers and Seller agree that to the extent any of the Purchased Assets include Intellectual Property Registrations that cover both Excluded Uses and Permitted Uses, such Intellectual Property Registration shall be jointly owned by Seller and Buyers, provided further that: (i) with respect to such assets, Buyer’s use of such assets shall be limited to Permitted Uses and Seller’s use of such assets shall be limited to the Excluded Uses; (ii) the parties shall cooperate with each other, including causing their employees and affiliates to provide testimony on an as needed basis with respect to any enforcement action to prosecute the rights of any of the parties (or their assigns) with respect to the jointly owned Intellectual Property or to defend any patent infringement actions with respect to the jointly owned Intellectual Property Registrations; and (iii) the obligations of the parties with respect to subparagraphs (i) and (ii) above shall survive the closing of this Agreement.

Section 2.02. Excluded Assets. All other assets of Seller not specifically set forth in Section 2.01 of the Disclosure Schedules shall remain the assets of Seller and are not being purchased by Buyer hereunder (collectively, the “**Excluded Assets**”), for the avoidance of doubt, Excluded Assets shall also include (but in no way be limited to):

- (a) the assets, properties and rights specifically set forth on **Section 2.02(a)** of the Disclosure Schedules;
- (b) the right of Seller to sell the Virexxa product for uses other than the Permitted Uses in the Retained Territory;
- (c) the CRO Contracts and the Retained Virexxa Contracts set forth on **Section 2.02(c)** of the Disclosure Schedules; and
- (d) the rights which accrue or will accrue to Seller under the Transaction Documents.

Section 2.03. Assumed Liabilities. Subject to the terms and conditions set forth herein, Buyers shall assume and agree to pay, perform and discharge only the following Liabilities of Seller (collectively, the “**Assumed Liabilities**”), and no other Liabilities:

(a) all Liabilities in respect of the Assigned Contracts but only to the extent that such Liabilities thereunder accrue after the Closing Date and do not relate to any failure to perform, improper performance, warranty or other breach, default or violation by Seller on or prior to the Closing; and

(b) those Liabilities of Seller set forth on **Section 2.03(b)** of the Disclosure Schedules.

Section 2.04. Excluded Liabilities. Notwithstanding the provisions of Section 2.03 or any other provision in this Agreement to the contrary, Buyers shall not assume and shall not be responsible to pay, perform or discharge any Liabilities of Seller or any of its Affiliates of any kind or nature whatsoever other than the Assumed Liabilities (the “**Excluded Liabilities**”). Seller shall, and shall cause each of its Affiliates to, pay and satisfy in due course all Excluded Liabilities which they are obligated to pay and satisfy.

Section 2.05. Purchase Price. The aggregate consideration for the Purchased Assets shall be set forth below (the “Purchase Price”), plus the assumption of the Assumed Liabilities. The Purchase Price shall be comprised of the following:

(a) The issuance of 100,500,000 shares (the “**Parent New Shares**”) of newly issued common stock of Xenetic (to be adjusted for forward or reverse splits occurring after the date of this Agreement) to Parent;

(b) The Current Convertible Note shall be amended and restated in its entirety to the form attached hereto as Exhibit G (the “**Revised Current Convertible Note**”);

(c) The Current Warrant shall be amended and restated in its entirety to the form attached hereto as Exhibit H (the “**Revised Current Warrant**”)

(d) The maturity date of the loans to Xenetic Biosciences LLC, UK (formerly Lipoxen PLC, UK) from SynBio, dated May 10, 2011 and October 24, 2011 shall be extended to the Outside Date;

(e) Xenetic shall issue to the persons named on Exhibit L hereto, Management Warrants to purchase an aggregate of up to 5,000,000 shares of Xenetic's common stock, at a price equal to \$0.42 per share;

(f) Xenetic shall issue to Parent the Additional Convertible Note, the Security Agreements and the Additional Warrant within five (5) Business Days of the date hereof and Parent shall fully fund the Initial Funding Tranche of the Additional Convertible Note; and

(g) If the Additional Convertible Note is not repaid or converted to equity by the Outside Date, then Xenetic shall issue to Parent another warrant with the same terms as the Additional Warrant; and

(h) Any New Parent Shares issuable pursuant to **Section 6.12**.

Section 2.06. Allocation of Purchase Price. Seller and Buyers agree that the Purchase Price and the Assumed Liabilities (plus other relevant items) shall be allocated among the Purchased Assets for all purposes (including Tax and financial accounting) as shown on the allocation schedule (the "**Allocation Schedule**"). A draft of the Allocation Schedule shall be prepared by Buyers and delivered to Seller within thirty (30) days following the Closing Date. If Seller notifies Buyers in writing that Seller objects to one or more items reflected in the Allocation Schedule, Seller and Buyers shall negotiate in good faith to resolve such dispute; *provided, however*, that if Seller and Buyers are unable to resolve any dispute with respect to the Allocation Schedule within thirty (30) days following the Closing Date, such dispute shall be resolved by the Independent Accountants. The fees and expenses of such accounting firm shall be borne equally by Seller and Buyers. Buyers and Seller shall file all Tax Returns (including amended returns and claims for refund) and information reports in a manner consistent with the Allocation Schedule.

Section 2.07. Withholding Tax. Buyers shall be entitled to deduct and withhold from the Purchase Price all Taxes that any of Buyers may be required to deduct and withhold under any provision of Tax Law. All such withheld amounts shall be treated as delivered to Seller hereunder. Seller shall provide to Buyers such duly executed forms and affidavits as Buyers shall require to enable Buyers to determine and document the amount of withholding tax, if any, as is applicable. The Buyer does not expect to deduct an amount in excess of ten percent (10%) of the Purchase Price pursuant to this Section 2.07.

Section 2.08. Third Party Consents; CRO Contracts; Retained Virexxa Contracts .

(a) To the extent that Sellers' rights under any Contract or Permit constituting a Purchased Asset, or any other Purchased Asset, may not be assigned to Buyer without the consent of another Person which has not been obtained, this Agreement shall not constitute an agreement to assign the same if an attempted assignment would constitute a breach thereof or be unlawful, and Seller shall use its commercially reasonable efforts to obtain any such required consent(s) as promptly as possible. If any such consent shall not be obtained or if any attempted assignment would be ineffective or would impair Buyers' rights under the Purchased Asset in question so that Buyers would not in effect acquire the benefit of all such rights, Seller, to the maximum extent permitted by law and the Purchased Assets, shall act after the Closing as Buyers' agent in order to obtain for it the benefits thereunder and shall cooperate, to the maximum extent permitted by Law and the Purchased Assets, with Buyers in any other reasonable arrangement designed to provide such benefits to Buyers; provided that Seller shall not have any obligation under this **Section 2.08** following the third anniversary of the Closing, and in no event shall the Seller be obligated to expend more than \$25,000 annually pursuant to its obligations under this **Section 2.08**. Notwithstanding any provision in this **Section 2.08** to the contrary, Buyers shall not be deemed to have waived their rights under **Section 7.02(d)** hereof unless and until Buyers either provide written waivers thereof or elect to proceed to consummate the transactions contemplated by this Agreement at Closing.

(b) With respect to the CRO Contracts, such contracts shall remain in the name of Seller or its Affiliates as applicable as parties and Buyers shall not assume such contracts, provided that: (i) to the extent that the following does not impair or damage the Purchased Assets, Seller shall cease performing any activities under each CRO Contract and shall request that the counterparties thereto cease performing any activities thereunder and shall terminate each CRO Contract promptly upon the request of Buyer (if not already terminated); (ii) Seller shall not interfere with, nor otherwise prevent in any way, Buyer entering into a new Contract with the counterparties thereof; and (iii) Seller shall deliver or cause its Affiliates to deliver promptly to Buyers copies of all correspondence received by Seller or its Affiliates from any counterparty or delivered by Seller or any of its Affiliates to any counterparty (in each instance translated into English if not in English) with respect to any of the CRO Contracts to the extent such correspondence relates in any way to any of the Purchased Assets. In the event Seller or any of its Affiliates fails to pay within five days when due any amounts owing under any CRO Contract (“**Pre-Closing CRO Contracts Expenses**”), Buyers may pay such amounts and then offset such payments against amounts due under the Additional Convertible Note (which, for the avoidance of doubt, shall not constitute a breach of the “Use of Proceeds” requirements set forth in Section 4.9 of the Securities Purchase Agreement).

(c) With respect to the Retained Virexxa Contracts set forth on **Section 2.02(c)** of the Disclosure Schedules, such contracts shall remain in the name of Seller or its Affiliates as applicable as parties and Buyers shall not assume such contracts, provided that: (i) to the extent that the following does not impair or damage the Purchased Assets, Seller shall cease performing any activities under each Retained Virexxa Contract and shall request that the counterparties thereto cease performing any activities thereunder and shall terminate each Retained Virexxa Contract promptly upon the request of Buyer (if not already terminated); (ii) Seller shall not interfere with, nor otherwise prevent in any way, Buyer entering into a new Contract with the counterparties thereof; and (iii) Seller shall deliver or cause its Affiliates to deliver promptly to Buyers copies of all correspondence received by Seller or its Affiliates from any counterparty or delivered by Seller or any of its Affiliates to any counterparty (in each instance translated into English if not in English) with respect to any of the Retained Virexxa Contracts to the extent such correspondence relates in any way to any of the Purchased Assets. In the event Seller or any of its Affiliates fails to pay within five days when due any amounts owing under any Retained Virexxa Contract (“**Pre-Closing Retained Virexxa Contracts Expenses**”), Buyers may pay such amounts and then offset such payments against amounts due and owing under the Additional Convertible Note (which, for the avoidance of doubt, shall not constitute a breach of the “Use of Proceeds” requirements set forth in Section 4.9 of the Securities Purchase Agreement).

Section 2.09. Intermediate Transfers. The parties acknowledge that the transfer of the Purchased Assets will be effected through one or more of the Seller's Affiliates. The Purchased Assets will be transferred from the Seller to LifeBio Laboratories LLC, and then to Parent, who will transfer the Purchased Assets to Buyers, provided that none of such transfers shall be made in a manner in which the obligations of Seller to Buyers hereunder are lessened as a result of such transfers or where the Purchased Assets being transferred are further encumbered in such process.

Section 2.10 Assignment of Hormone Resistant Provisional Patent Applications. Simultaneous with the funding of the execution of this Agreement, Seller shall cause Dimitry Genkin and Kirill Surkhov (the "**Inventors**") to assign the Hormone Resistant Provisional Patent Application and International Patent Application No. PCT/EP2015/075990 and all patents, divisions, reissues, continuations, continuations-in-part, and any extensions thereof and rights of priority therein, including the right to sue for past infringement and to any such recovery, to Lipoxen in consideration for the issuance of 5,500,000 shares of Xenetic Common Stock to each of them (11,000,000 shares in the aggregate—the "**Inventors' Shares**"). The assignment shall be made in accordance with the form of Genkin/Surkhov IP Assignment attached hereto as Exhibit J. Seller further agrees, at its sole cost and expense to fund the costs and fees necessary to convert the Hormone Resistant Provisional Patent Application to a full patent application in favor of Lipoxen.

ARTICLE III

Closing

Section 3.01. Closing. Subject to the terms and conditions of this Agreement, the consummation of the transactions contemplated by this Agreement (the "**Closing**") shall take place via email exchange of signature pages on the Business Day after all of the conditions to Closing set forth in Article VII are either satisfied or waived (other than conditions which, by their nature, are to be satisfied on the Closing Date), or at such other time, date or place as Seller and Xenetic may mutually agree upon in writing. The date on which the Closing is to occur is herein referred to as the "**Closing Date**."

Section 3.02. Closing Deliverables.

(a) At the Closing, Seller and/or Parent (as applicable) shall deliver to Buyers the following:

(i) a bill of sale in form and substance reasonably satisfactory to Buyers and Seller (the “**Bill of Sale**”) and duly executed by Seller, transferring the tangible personal property included in the Purchased Assets to Lipoxen or its designee;

(ii) an assignment and assumption agreement in form and substance reasonably satisfactory to Buyers and Seller (the “**Assignment and Assumption Agreement**”) and duly executed by Seller, effecting the assignment to and assumption by Lipoxen of the Purchased Assets and the Assumed Liabilities;

(iii) assignments in form and substance reasonably satisfactory to Buyers and Seller (the “**Intellectual Property Assignments**”) and duly executed by Seller or Parent or their Affiliates (as applicable), transferring all of such party’s right, title and interest in and to the Purchased Assets and the Intellectual Property Licenses to Lipoxen or its designee, together with the originals of all Contracts, Environmental Permits and documentation associated with the Purchased Assets. For clarity, Purchased Assets that constitute Intellectual Property shall be transferred from Parent (or an Affiliate) to Lipoxen, while any other Purchased Assets shall be transferred directly from Seller to Lipoxen.

(iv) the Transition Services and Resupply Agreement in form and substance satisfactory to Buyers (the “**Transition Services and Resupply Agreement**”) and duly executed by Seller and Parent, which will provide for, among other things, Parent and Seller’s continued supply of the Virexxa molecule (and any related active pharmaceutical ingredients associated with production of Virexxa) to Lipoxen and its designees on a cost to manufacture plus 20% basis, and subject to Buyers’ right to inspect all books and records of Seller and its Affiliates to verify proper pricing of the molecule;

(v) proof of insurance in place to cover claims from patients in clinical trials or under recruitment programs with respect to Virexxa naming Seller or one of its Affiliates as an insured and naming each of Buyers as additional insureds at the Closing;

(vi) the Seller Closing Certificate;

(vii) the certificates of the CEO or Board member of Seller required by **Section 7.02(h)** and **Section 7.02(i)**;

(viii) the Revised Current Convertible Note and the Revised Current Warrant duly executed by Parent and Xenetic;

(ix) the Securities Purchase Agreement Amendment and Registration Rights Agreement Amendment;

(x) the Genkin/Surkov IP Assignment duly executed by Dimitry Genkin and Kirill Surkov;

(xi) the SynBio Amendment duly executed by SynBio and Sellers; and

(xii) such other customary instruments of transfer, assumption, filings or documents, in form and substance reasonably satisfactory to Buyers, as may be required to give effect to this Agreement.

(b) At the Closing, Buyers shall deliver to Seller and/or Parent (as applicable) the following:

- (i) the Assignment and Assumption Agreement duly executed by Lipoxen or its designee;
- (ii) the Buyers Closing Certificate;
- (iii) proof that the Stock Condition has been satisfied;
- (iv) the SynBio Amendment duly executed by Xenetic;
- (v) the certificates of the Secretary or Assistant Secretaries of Buyers required by **Section 7.03(g)** and **Section 7.03(h)**;
- (vi) the Securities Purchase Agreement Amendment and Registration Rights Agreement Amendment;
- (vii) the Revised Current Convertible Note and the Revised Current Warrant; and
- (viii) the Genkin/Surkov IP Assignment duly executed by Buyers.

ARTICLE IV

Representations and warranties of seller

Except as set forth in the correspondingly numbered section of the Disclosure Schedules, each of Seller and Parent jointly and severally represents and warrants to Buyers that the statements contained in this Article IV are true and correct as of the date hereof.

Section 4.01. Organization and Qualification of Seller. Seller is a corporation duly organized, validly existing and in good standing under the Laws of Estonia. Parent is a corporation duly organized, validly existing and in good standing under the Laws of Russia. Seller has full corporate power and authority to own or operate the Purchased Assets. Seller is duly licensed or qualified to do business and is in good standing in each jurisdiction in which the ownership of the Purchased Assets makes such licensing or qualification necessary.

Section 4.02. Authority of Seller. Each of Seller and Parent has full corporate power and authority to enter into this Agreement and the other Transaction Documents to which Seller or Parent is a party, to carry out its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery by each of Seller and Parent of this Agreement and any other Transaction Document to which Seller or Parent is a party, the performance by Seller or Parent of its obligations hereunder and thereunder and the consummation by Seller or Parent of the transactions contemplated hereby and thereby have been duly authorized by all requisite corporate action on the part of Seller and Parent. This Agreement has been duly executed and delivered by Seller and Parent, and this Agreement constitutes a legal, valid and binding obligation of each of Seller and Parent enforceable against each of Seller and Parent in accordance with its terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles. When each other Transaction Document to which Seller or Parent is or will be a party has been duly executed and delivered by Seller and Parent (assuming due authorization, execution and delivery by each other party thereto), such Transaction Document will constitute a legal and binding obligation of Seller and Parent (as applicable) enforceable against it in accordance with its terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles.

Section 4.03. No Conflicts; Consents. The execution, delivery and performance by each of Seller and Parent of this Agreement and the other Transaction Documents to which it is a party, and the consummation of the transactions contemplated hereby and thereby, do not and will not: (a) conflict with or result in a violation or breach of, or default under, any provision of the organizational documents of Parent or Seller; (b) conflict with or result in a violation or breach of any provision of any Law or Governmental Order applicable to Seller, Parent or the Purchased Assets; (c) require the consent, notice or other action by any Person under, conflict with, result in a violation or breach of, constitute a default or an event that, with or without notice or lapse of time or both, would constitute a default under, result in the acceleration of or create in any party the right to accelerate, terminate, modify or cancel any Contract or Permit included in the Purchased Assets or to which any of the Purchased Assets are subject (including any Assigned Contract); or (d) result in the creation or imposition of any Encumbrance other than Permitted Encumbrances on the Purchased Assets, except, in the case of (b), (c) and (d), as could not reasonably be expected to result in a Material Adverse Effect. No consent, approval, Permit, Governmental Order, declaration or filing with, or notice to, any Governmental Authority is required by or with respect to Seller in connection with the execution and delivery of this Agreement or any of the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby.

Section 4.04. Material Contracts.

(a) **Section 4.04(a)** of the Disclosure Schedules lists each Contract of Seller or Parent (x) by which any of the Purchased Assets are bound or affected or (y) to which Seller or Parent is a party, or by which it is bound, in connection with the Purchased Assets (such Contracts, together with all Contracts relating to Purchased Assets set forth in **Section 4.06(c)** and **Section 4.06(e)** of the Disclosure Schedules, being “**Material Contracts**”).

(b) Each Material Contract is valid and binding on Seller or Parent (as applicable) in accordance with its terms and is in full force and effect. None of Seller or, to Seller’s Knowledge, any other party thereto is in breach of or default under (or is alleged to be in breach of or default under), or has provided or received any notice of any intention to terminate, any Material Contract. No event or circumstance has occurred that, with notice or lapse of time or both, would constitute an event of default under any Material Contract or result in a termination thereof or would cause or permit the acceleration or other changes of any right or obligation or the loss of any benefit thereunder. True and complete copies of each Material Contract (including all modifications, amendments and supplements thereto and waivers thereunder) have been made available to Buyers. To Seller’s Knowledge, there are no material disputes pending or threatened under any Contract included in the Purchased Assets.

Section 4.05. Title to Purchased Assets. Seller has good and valid title to all of the Purchased Assets. All such Purchased Assets are free and clear of Encumbrances except for the following (collectively referred to as “**Permitted Encumbrances**”):

(a) those items set forth in **Section 4.05** of the Disclosure Schedules;

(b) liens for Taxes not yet due and payable or being contested in good faith by appropriate procedures;

(c) mechanics’, carriers’, workmen’s, repairmen’s or other like liens arising or incurred in the ordinary course of business consistent with past practice or amounts that are not delinquent and which are not, individually or in the aggregate, material to the Purchased Assets; or

(d) liens arising under original purchase price conditional sales contracts and equipment leases with third parties entered into in the ordinary course of business consistent with past practice which are not, individually or in the aggregate, material to the Purchased Assets.

Section 4.06. Intellectual Property.

(a) **Section 4.06(a)** of the Disclosure Schedules lists all (i) Intellectual Property Registrations and (ii) Purchased Assets that are not registered but that are material to the contemplated development of Virexxa for all Permitted Uses worldwide, subject to the rights of Seller to exploit the Excluded Uses in the Retained Territory. Except as could not reasonably be expected to result in a Material Adverse Effect, all required filings and fees related to the Intellectual Property Registrations have been timely filed with and paid to the relevant Governmental Authorities and authorized registrars, and all Intellectual Property Registrations are otherwise in good standing. Seller has provided Buyers with true and complete copies of file histories, documents, certificates, office actions, correspondence, docket and other materials related to all Intellectual Property Registrations.

(b) Except as could not reasonably be expected to result in a Material Adverse Effect, seller owns, exclusively all right, title and interest in and to the Purchased Assets, free and clear of Encumbrances. Without limiting the generality of the foregoing, Seller has entered into binding, written agreements with every current and former employee of Seller, and with every current and former independent contractor or any other Person who in any manner has a claim of inventorship or ownership of any of the Purchased Assets, whereby such employees, independent contractors or Persons (i) assign to Seller any ownership interest and right they may have in the Purchased Assets; (ii) acknowledge Seller’s exclusive ownership of all Purchased Assets; and (iii) agree to cooperate with Seller and its assigns in connection with any lawsuit or administrative proceeding related to the enforcement or defense of the Intellectual Property and related to obtaining patent and other protection associated with the Intellectual Property. Seller has provided Buyers with true and complete copies of all such agreements. Seller is in full compliance with all legal requirements applicable to the Purchased Assets and Seller’s ownership and use thereof.

(c) **Section 4.06(c)** of the Disclosure Schedules lists all Intellectual Property Licenses. Seller has made available to Buyers with true and complete copies of all such Intellectual Property Licenses. All such Intellectual Property Licenses are valid, binding and enforceable between Seller and the other parties thereto, and Seller and such other parties are in full compliance with the terms and conditions of such Intellectual Property Licenses.

(d) To the best of Seller's Knowledge, the Intellectual Property does not infringe upon, violate or misappropriate the intellectual property rights of any person or entity. Seller has not received any communication, and no Action has been instituted, settled or, to Seller's Knowledge, threatened that alleges any such infringement, violation or misappropriation of Intellectual Property of any person, and none of the Purchased Assets are subject to any outstanding Lien and/or Governmental Order.

(e) **Section 4.06(e)** of the Disclosure Schedules lists all licenses, sublicenses and other agreements pursuant to which Seller grants rights or authority to any Person with respect to any Purchased Assets or Intellectual Property Licenses. Seller has provided Buyers with true and complete copies of all such agreements. All such agreements are valid, binding and enforceable between Seller and the other parties thereto, and Seller and, to the Seller's Knowledge, such other parties are in full compliance with the terms and conditions of such agreements.

(f) **Section 4.06(f)** of the Disclosure Schedules sets forth: (i) a list of all patent law firms and any attorneys at such law firms involved in the preparation, prosecution and maintenance of any patent whose rights are provided to Xenetic pursuant to this Agreement; (ii) a list of all patents, pending or issued, that are owned, controlled, or licensed by either Seller that contain one or more claims that covers Virexxa for a Permitted Use.

Section 4.07. Suppliers and Inventory. Section 4.07 of the Disclosure Schedules sets forth with respect to the Purchased Assets: (i) each supplier to whom Seller has paid consideration for goods or services rendered in an amount greater than or equal to \$10,000 for each of the two most recent completed fiscal years (collectively, the "**Material Suppliers**"); and (ii) a list of the goods and services purchased from such supplier. Seller has not received any notice, and has no Knowledge, that any of the Material Suppliers has ceased, or intends to cease, to supply goods or services to Seller.

All Virexxa inventory (including the location thereof) is set forth in Section 4.07 of the Disclosure Schedules, is free and clear of all Encumbrances, and consists of a quality and quantity usable and testable for the purposes for which such inventory was produced, including but not limited to use in research, development, clinical trials and as otherwise used by Seller in the past.

Section 4.08. Insurance. Section 4.08 of the Disclosure Schedules sets forth (a) a true and complete list of all current policies or binders of liability, product liability, umbrella liability and medical liability insurance (including by not limited to coverage for patients in clinical trials or under recruitment programs which may assert claims against Seller, its Affiliates or assigns) maintained by Seller or its Affiliates and relating to the Purchased Assets or the Assumed Liabilities (collectively, the “**Insurance Policies**”); and (b) with respect to the Purchased Assets or the Assumed Liabilities, a list of all pending claims and the claims history for Seller since January 1, 2014. There are no claims related to the Purchased Assets or the Assumed Liabilities pending under any such Insurance Policies as to which coverage has been questioned, denied or disputed or in respect of which there is an outstanding reservation of rights. Neither Seller nor, to Seller’s Knowledge, any of its Affiliates has received any written notice of cancellation of, premium increase with respect to, or alteration of coverage under, any of such Insurance Policies. All premiums due on such Insurance Policies have either been paid or, if not yet due, accrued. All such Insurance Policies (a) are in full force and effect and enforceable in accordance with their terms; and (b) have not been subject to any lapse in coverage. None of Seller or, to the Seller’s Knowledge, any of its Affiliates is in default under, or has otherwise failed to comply with, in any material respect, any provision contained in any such Insurance Policy. True and complete copies of the Insurance Policies have been made available to Buyers.

Section 4.09. Legal Proceedings; Governmental Orders.

(a) Except as set forth in **Section 4.09(a)** of the Disclosure Schedules, as of the date hereof there are no Actions pending or, to Seller’s Knowledge, threatened against or by Seller or any of its Affiliates: (a) relating to or affecting the Purchased Assets or the Assumed Liabilities; (b) seeking damages for personal injury related to usage of Virexxa; or (c) that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement.

(b) Except as set forth in **Section 4.09(b)** of the Disclosure Schedules, there are no outstanding Governmental Orders and no unsatisfied judgments, penalties or awards against, relating to or affecting the Purchased Assets.

Section 4.10. Compliance With Laws; Permits.

(a) Except as could not reasonably be expected to result in a Material Adverse Effect, each of Seller and Parent has complied during the last three years, and is now complying, with all Laws applicable to the ownership and use of the Purchased Assets.

(b) All material Permits required for the ownership and use of the Purchased Assets have been obtained by Seller and are valid and in full force and effect. Except as could not reasonably be expected to result in a Material Adverse Effect, all fees and charges with respect to such Permits as of the date hereof have been paid in full. **Section 4.10(b)** of the Disclosure Schedules lists all current material Permits issued to Seller which are related to the conduct of the ownership and use of the Purchased Assets, including the names of the Permits and their respective dates of issuance and expiration. To the Seller’s Knowledge, no event has occurred that, with or without notice or lapse of time or both, would reasonably be expected to result in the revocation, suspension, lapse or limitation of any Permit set forth in **Section 4.10(b)** of the Disclosure Schedules.

Section 4.11. Environmental Matters.

(a) The operations of Seller with respect to the Purchased Assets are currently and have been during the last five years in compliance with all applicable Environmental Laws. Seller has not received from any Person, with respect to the Purchased Assets, any: (i) Environmental Notice or Environmental Claim; or (ii) written request for information pursuant to Environmental Law, which, in each case, either remains pending or unresolved, or is the source of ongoing obligations or requirements.

(b) To Seller's Knowledge, there does not exist any Environmental condition, event or circumstance that might prevent or impede the contemplated use by Buyers of the Purchased Assets or preclude the transfer of any of the Purchased Assets.

(c) To the Seller's Knowledge, there has been no Release of Hazardous Materials giving rise to potential liability pursuant to or in contravention of any applicable Environmental Law with respect to the Purchased Assets, and Seller has not received any Environmental Notice that could adversely impact the contemplated use by the Buyers of the Purchased Assets related to any Hazardous Materials or applicable Environmental Law.

(d) Seller has not retained or assumed, by contract or operation of Law, any liabilities or obligations of third parties under any applicable Environmental Law.

(e) To the Seller's Knowledge, there is not any condition, event or circumstance concerning the Release or regulation of Hazardous Materials that might, after the Closing Date, prevent, impede or materially increase the costs associated with the ownership, performance or use of the Purchased Assets as currently carried out.

Section 4.12. Brokers. No broker, finder or investment banker is entitled to any brokerage, finders or other fee or commission in connection with the transactions contemplated by this Agreement or any other Transaction Document based upon arrangements made by or on behalf of Seller or Parent.

ARTICLE V

Representations and warranties of buyers

Buyers represent and warrant to Seller that the statements contained in this Article V are true and correct as of the date hereof.

Section 5.01. Organization of Buyer. Xenetic is a corporation duly organized, validly existing and in good standing under the Laws of the state of Nevada. Lipoxen is a corporation duly organized, validly existing and in good standing under the Laws of the United Kingdom.

Section 5.02. Authority of Buyer. Subject to meeting the Stock Condition, each of Buyers has full corporate power and authority to enter into this Agreement and the other Transaction Documents to which it is a party, to carry out its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Buyers of this Agreement and any other Transaction Document to which either or both Buyers is a party, the performance by Buyers of their obligations hereunder and thereunder and the consummation by Buyers of the transactions contemplated hereby and thereby have been duly authorized by all requisite corporate action on the part of Buyers, with the exception of the Stock Condition. This Agreement has been duly executed and delivered by Buyers, and (assuming due authorization, execution and delivery by Seller) this Agreement constitutes a legal, valid and binding obligation of Buyers enforceable against Buyers in accordance with its terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles. When each other Transaction Document to which a Buyer is or will be a party has been duly executed and delivered by Buyer(s) (assuming due authorization, execution and delivery by each other party thereto), such Transaction Document will constitute a legal and binding obligation of the Buyer(s) party thereto, enforceable against it in accordance with its terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles.

Section 5.03. No Conflicts; Consents. The execution, delivery and performance by Buyers of this Agreement and the other Transaction Documents to which either or both of them is a party, and the consummation of the transactions contemplated hereby and thereby, do not and will not, with the exception of the Stock Condition (which must be satisfied prior to the Closing Date): (a) conflict with or result in a violation or breach of, or default under, any provision of the certificate of incorporation, by-laws or other organizational documents of Buyers; (b) conflict with or result in a violation or breach of any provision of any Law or Governmental Order applicable to Buyers; or (c) except as set forth in Section 5.03 of the Disclosure Schedules, require the consent, notice or other action by any Person under any Contract to which a Buyer is a party. Except for the need to satisfy the Stock Condition, no consent, approval, Permit, Governmental Order, declaration or filing with, or notice to, any Governmental Authority is required by or with respect to Buyers in connection with the execution and delivery of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby, except for such consents, approvals, Permits, Governmental Orders, declarations, filings or notices which, in the aggregate, would not have a Material Adverse Effect.

Section 5.04. Brokers. No broker, finder or investment banker is entitled to any brokerage, finders or other fee or commission in connection with the transactions contemplated by this Agreement or any other Transaction Document based upon arrangements made by or on behalf of Buyers.

Section 5.05. Legal Proceedings. There are no Actions pending or, to Buyers' knowledge, threatened against or by either Buyer or any Affiliate of either Buyer that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. No event has occurred or circumstances exist that may give rise or serve as a basis for any such Action.

Section 5.06. 1934 Act Reports. Xenetic's 1934 Act Reports are true and correct in all material respects as of the date(s) filed and include all current material information regarding Xenetic and its business, other than those items set forth on **Section 5.06** of the Disclosure Schedules.

Section 5.07. Rights of Minority Holders. There no rights of holders of Xenetic securities, whether arising by contract, under the certificate of incorporation or other governance documents or under the laws of the State of Nevada, which would serve as a basis for any claim or action against the Seller or its affiliates as a result of the transactions contemplated hereby.

ARTICLE VI

Covenants

Section 6.01. Conduct of Seller Operations Prior to the Closing. From the date hereof until the Closing, except as otherwise provided in this Agreement or consented to in writing by either Buyer (which consent shall not be unreasonably withheld or delayed), Seller shall (x) conduct ongoing research and development with respect to the Purchased Assets in the ordinary course of business consistent with past practice; and (y) use commercially reasonable efforts to maintain and preserve intact the Purchased Assets. Without limiting the foregoing, from the date hereof until the Closing Date, Seller shall:

(a) preserve and maintain all Permits presently in place and which will be required for the ownership or contemplated use by Buyers of the Purchased Assets;

(b) pay the debts, Taxes and other obligations of associated with the Purchased Assets when due;

(c) maintain the Purchased Assets in the same condition as they were on the date of this Agreement;

- (d) continue in full force and effect without modification all Insurance Policies, except as required by applicable Law;
- (e) defend and protect the properties and assets included in the Purchased Assets from infringement or usurpation;
- (f) perform all of its obligations under all Assigned Contracts;
- (g) maintain the Books and Records in accordance with past practice;
- (h) continue to maintain the Purchased Assets set forth in **Section 4.06(a)** of the Disclosure Schedules;
- (i) comply in all material respects with all Laws applicable to the Purchased Assets; and
- (j) continue to file and pay any fees due for any Purchased Assets.

Section 6.02. Access to Information.

(a) From the date hereof until the Closing, Seller shall (a) afford Buyers and their Representatives full and free access to and the right to inspect all of the Purchased Assets, and any Books and Records, Contracts and other documents and data related to the Purchased Assets; (b) furnish Buyers and their Representatives with such financial, operating and other data and information related to the Purchased Assets as Buyers or any of their Representatives may reasonably request; and (c) instruct the Representatives of Seller to cooperate with Buyers in their investigation of the Purchased Assets. Any investigation pursuant to this **Section 6.02(a)** shall be conducted during normal business hours and in such manner as not to interfere unreasonably with the conduct of research and development effort associated with the Purchased Assets or any other businesses of Seller. No investigation by Buyers or other information received by Buyers shall operate as a waiver or otherwise affect any representation, warranty or agreement given or made by Seller in this Agreement.

(b) From the date hereof until the Closing, Buyers shall (a) afford Seller and its Representatives full and free access to and the right to inspect all of the properties, assets (including, but not limited to the Buyer Intellectual Property), premises, Books and Records, Contracts and other documents and data related to the Buyers' business; (b) furnish Seller and its Representatives with such financial, operating and other data and information related to the Buyers' business as Seller or any of its Representatives may reasonably request; and (c) instruct the Representatives of Buyers to cooperate with Seller in its investigation of the Buyers' business. Any investigation pursuant to this **Section 6.02(b)** shall be conducted in such manner as not to interfere unreasonably with the conduct of the Buyers' business. No investigation by Seller or other information received by Seller shall operate as a waiver or otherwise affect any representation, warranty or agreement given or made by Buyers in this Agreement.

Section 6.03. Notice of Certain Events.

(a) From the date hereof until the Closing, Seller shall promptly notify Buyers in writing of:

(i) any fact, circumstance, event or action, the existence, occurrence or taking of which (A) has had, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, (B) has resulted in, or could reasonably be expected to result in, any representation or warranty made by Seller hereunder not being true and correct or (C) has resulted in, or could reasonably be expected to result in, the failure of any of the conditions set forth in Section 7.02 to be satisfied;

(ii) any written notice or other written communication from any Person alleging that the consent of such Person is or may be required in connection with the transactions contemplated by this Agreement;

(iii) any written notice or other written communication from any Governmental Authority in connection with the Purchased Assets and any transactions contemplated by this Agreement; and

(iv) any Actions commenced or, to Seller's Knowledge, threatened against Parent or Seller relating to the Purchased Assets or the Assumed Liabilities that, if pending on the date of this Agreement, would have been required to have been disclosed pursuant to **Section 4.09** or that relates to the consummation of the transactions contemplated by this Agreement.

(b) Buyers' receipt of information pursuant to this **Section 6.03** shall not operate as a waiver or otherwise affect any representation, warranty or agreement given or made by Seller in this Agreement (including **Section 8.02** and **Section 9.01(b)**) and shall not be deemed to amend or supplement the Disclosure Schedules.

(c) From the date hereof until the Closing, Buyers shall promptly notify Seller in writing of:

(i) any fact, circumstance, event or action the existence, occurrence or taking of which (A) has had, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, (B) has resulted in, or could reasonably be expected to result in, any representation or warranty made by Buyers hereunder not being true and correct or (C) has resulted in, or could reasonably be expected to result in, the failure of any of the conditions set forth in **Section 7.03** to be satisfied;

(ii) any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the transactions contemplated by this Agreement;

(iii) any notice or other communication from any Governmental Authority in connection with the assets (including Buyer Intellectual Property) and any transactions contemplated by this Agreement; and

(iv) any Actions commenced or, to Buyers' Knowledge, threatened against, relating to or involving or otherwise affecting the Buyers' business or the Buyers' assets or properties that, if pending on the date of this Agreement, would have been required to have been disclosed pursuant to **Section 5.11** or that relates to the consummation of the transactions contemplated by this Agreement.

(d) Seller's receipt of information pursuant to this **Section 6.03** shall not operate as a waiver or otherwise affect any representation, warranty or agreement given or made by Buyers in this Agreement (including **Section 8.03** and **Section 9.01(c)**) and shall not be deemed to amend or supplement the Disclosure Schedules.

Section 6.04. Employees and Employee Benefits

(a) In the event that the Transition Services and Resupply Agreement is not entered into, commencing on the Closing Date either of Buyers, at their sole discretion, may retain as an independent contractor or offer employment, on an "at will" (or other) basis, to Srdjan Gavrilovic, an employee of Seller who provides services to Seller related to the Purchased Assets (Buyers may also elect not to engage or employ Srdjan Gavrilovic pursuant to this sentence). Either Buyer shall notify Seller (at least two Business Days prior to the Closing Date) if it desires to retain or offer employment to Srdjan Gavrilovic, and Seller shall terminate his employment on the Closing Date. In the event that such termination results in severance pay being owed, Buyer shall be responsible for such amounts.

(b) Except as expressly set forth above, Seller shall be solely responsible, and Buyers shall have no obligations whatsoever for, any compensation or other amounts payable to any current or former employee, officer, director, independent contractor or consultant of the Seller or its Affiliates with respect to the Purchased Assets, including, without limitation, hourly pay, commission, bonus, salary, accrued vacation, fringe, pension or profit sharing benefits for any period relating to the service with Seller at any time on or prior to the Closing Date and Seller shall pay all such amounts to all entitled persons on or prior to the Closing Date.

(c) Seller shall remain solely responsible for the satisfaction of all claims for medical, dental, life insurance, health accident or disability benefits brought by or in respect of current or former employees, officers, directors, independent contractors or consultants performing work with respect to the Purchased Assets or the spouses, dependents or beneficiaries thereof, which claims relate to events occurring on or prior to the Closing Date. Seller also shall remain solely responsible for all worker's compensation claims of any current or former employees, officers, directors, independent contractors or consultants performing work with respect to the Purchased Assets which relate to events occurring on or prior to the Closing Date. Seller shall pay, or cause to be paid, all such amounts to the appropriate persons as and when due.

(d) Each employee of Seller who have performed work with respect to the Purchased Assets and who becomes employed by a Buyer in connection with the transaction shall be given service credit for the purpose of eligibility under the group health plan and eligibility and vesting only under the defined contribution retirement plan for his or her period of service with the Seller prior to the Closing Date. Buyers will provide benefits equal to those received from Seller to each such employee for a minimum of twelve months from the Closing Date.

Section 6.05. Confidentiality. From and after the Closing, Seller shall, and shall cause its Affiliates to, hold, and shall use its reasonable best efforts to cause its or their respective Representatives to hold, in confidence any and all information, whether written or oral, concerning the Purchased Assets, except to the extent that Seller can show that such information (a) is generally available to and known by the public through no fault of Seller, any of its Affiliates or their respective Representatives; or (b) is lawfully acquired by Seller, any of its Affiliates or their respective Representatives from and after the Closing from sources which are not prohibited from disclosing such information by a legal, contractual or fiduciary obligation. If Seller or any of its Affiliates or their respective Representatives are compelled to disclose any information by judicial or administrative process or by other requirements of Law, Seller shall promptly notify Buyers in writing and shall disclose only that portion of such information which Seller is advised by its counsel is legally required to be disclosed, *provided that* Seller shall use reasonable best efforts at Buyers' expense to obtain an appropriate protective order or other reasonable assurance that confidential treatment will be accorded such information.

Section 6.06. Non-competition; Non-solicitation.

(a) For a period of five years commencing on the Closing Date (the "**Restricted Period**;" (other than with respect to those jurisdictions in which a five-year restrictive period would result in the infringement of anti-competition law which may be punishable as a criminal offense, in which case the Restricted Period for such jurisdiction shall be limited to three years from the Closing Date)), other than as contemplated by the Transition Services and Resupply Agreement, Seller shall not, and shall not permit any of its Affiliates to, directly or indirectly: (i) engage in the Restricted Business in the Territory; (ii) have an interest in any Person that engages directly or indirectly in the Restricted Business in the Territory in any capacity, including as a partner, shareholder, member, employee, principal, agent, trustee or consultant; or (iii) cause or knowingly induce or encourage any material supplier or licensor of the technology, goods or services associated with the Purchased Assets, or any other Person who has a material business relationship with the research and development activities associated with the Purchased Assets, to terminate or modify any such actual or prospective relationship or lessen the amount of business they do with either Buyer (or its Affiliates) with respect to such Buyer's (or its Affiliates') use of the Purchased Assets. Notwithstanding the foregoing, Seller may own, directly or indirectly: (i) capital stock of Xenetic; and (ii) solely as an investment, securities of any Person traded on any national securities exchange if Seller is not a controlling Person of, or a member of a group which controls, such Person and does not, directly or indirectly, own 10% or more of any class of securities of such Person.

(b) During the Restricted Period, Seller shall not, and shall not permit any of its Affiliates to, directly or indirectly, hire or solicit any person who is offered employment by either Buyer pursuant to **Section 6.04(a)** or is or was employed by either Buyer or its Affiliates with respect to activities associated with the Purchased Assets during the Restricted Period, or encourage any such employee to leave such employment or hire any such employee who has left such employment, except pursuant to a general solicitation which is not directed specifically to any such employees; *provided, that* nothing in this **Section 6.06(b)** shall prevent Seller or any of its Affiliates from hiring (i) any employee whose employment has been terminated by a Buyer or (ii) after 180 days from the date of termination of employment, any employee whose employment has been terminated by the employee.

(c) Seller acknowledges that a breach or threatened breach of this **Section 6.06** would give rise to irreparable harm to Buyers, for which monetary damages would not be an adequate remedy, and hereby agrees that in the event of a breach or a threatened breach by Seller of any such obligations, Buyers shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to seek equitable relief, including a temporary restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction (without any requirement to post bond).

(d) Seller acknowledges that the restrictions contained in this **Section 6.06** are reasonable and necessary to protect the legitimate interests of Buyers and constitute a material inducement to Buyers to enter into this Agreement and consummate the transactions contemplated by this Agreement. In the event that any covenant contained in this **Section 6.06** should ever be adjudicated to exceed the time, geographic, product or service or other limitations permitted by applicable Law in any jurisdiction, then any court is expressly empowered to reform such covenant, and such covenant shall be deemed reformed, in such jurisdiction to the maximum time, geographic, product or service or other limitations permitted by applicable Law. The covenants contained in this **Section 6.06** and each provision hereof are severable and distinct covenants and provisions. The invalidity or unenforceability of any such covenant or provision as written shall not invalidate or render unenforceable the remaining covenants or provisions hereof, and any such invalidity or unenforceability in any jurisdiction shall not invalidate or render unenforceable such covenant or provision in any other jurisdiction.

Section 6.07. Governmental Approvals and Consents

(a) Each party hereto shall, as promptly as possible, (i) make, or cause or be made, all filings and submissions required under any Law applicable to such party or any of its Affiliates; and (ii) use reasonable best efforts to obtain, or cause to be obtained, all consents, authorizations, orders and approvals from all Governmental Authorities that may be or become necessary for its execution and delivery of this Agreement and the performance of its obligations pursuant to this Agreement and the other Transaction Documents. Each party shall cooperate fully with the other party and its Affiliates in promptly seeking to obtain all such consents, authorizations, orders and approvals. The parties hereto shall not willfully take any action that will have the effect of delaying, impairing or impeding the receipt of any required consents, authorizations, orders and approvals. Further, following the execution of this Agreement (upon the request of Buyer), Kevelt will cooperate with Buyer to transfer to Buyer all United States orphan designations of Virexxa (including, but not limited to, treatment of progesterone receptor negative endometrial cancer in conjunction with progesterone therapy, under the generic name Cridanimod), including, but not limited to, assisting Buyer with the preparation of any filings necessary to effectuate such transfer and providing writing consent to such transfer.

(b) Seller and Buyers shall use reasonable best efforts to give all notices to, and obtain all consents from, all third parties that are described in **Section 6.07** of the Disclosure Schedules.

(c) Without limiting the generality of the parties' undertakings pursuant to subsections (a) and (b) above, each of the parties hereto shall use all reasonable best efforts to:

(i) respond to any inquiries by any Governmental Authority regarding antitrust or other matters with respect to the transactions contemplated by this Agreement or any other Transaction Document;

(ii) avoid the imposition of any order or the taking of any action that would restrain, alter or enjoin the transactions contemplated by this Agreement or any other Transaction Document; and

(iii) in the event any Governmental Order adversely affecting the ability of the parties to consummate the transactions contemplated by this Agreement or any other Transaction Document has been issued, to have such Governmental Order vacated or lifted.

(d) All analyses, appearances, meetings, discussions, presentations, memoranda, briefs, filings, arguments, and proposals made by or on behalf of either party before any Governmental Authority or the staff or regulators of any Governmental Authority, in connection with the transactions contemplated hereunder (but, for the avoidance of doubt, not including any interactions between Seller or Buyers with Governmental Authorities in the ordinary course of business, any disclosure which is not permitted by Law or any disclosure containing confidential information) shall be disclosed to the other party hereunder in advance of any filing, submission or attendance, it being the intent that the parties will consult and cooperate with one another, and consider in good faith the views of one another, in connection with any such analyses, appearances, meetings, discussions, presentations, memoranda, briefs, filings, arguments, and proposals. Each party shall give notice to the other party with respect to any meeting, discussion, appearance or contact with any Governmental Authority or the staff or regulators of any Governmental Authority, with such notice being sufficient to provide the other party with the opportunity to attend and participate in such meeting, discussion, appearance or contact.

(e) Notwithstanding the foregoing, nothing in this **Section 6.07** shall require, or be construed to require, Buyers or any of their Affiliates to agree to (i) sell, hold, divest, discontinue or limit, before or after the Closing Date, any assets, businesses or interests of Buyers or any of their Affiliates; (ii) any conditions relating to, or changes or restrictions in, the operations of any such assets, businesses or interests which, in either case, would reasonably be expected to result in a Material Adverse Effect or materially and adversely impact the economic or business benefits to Buyers of the transactions contemplated by this Agreement and the other Transaction Documents; or (iii) any material modification or waiver of the terms and conditions of this Agreement.

Section 6.08. Books and Records.

(a) In order to facilitate the resolution of any claims made against or incurred by Seller prior to the Closing, or for any other reasonable purpose, for a period of five (5) years after the Closing, Buyers shall:

(i) retain the Books and Records (including personnel files) relating to periods prior to the Closing in a manner reasonably consistent with the prior practices of Seller; and

(ii) upon reasonable notice, afford the Seller's Representatives reasonable access (including the right to make, at Seller's expense, photocopies), during normal business hours, to such Books and Records.

(b) In order to facilitate the resolution of any claims made by or against or incurred by Buyers after the Closing, or for any other reasonable purpose, for a period of five (5) years following the Closing, Seller shall:

(i) retain the books and records (including personnel files) of Seller which relate to the Purchased Assets for periods prior to the Closing; and

(ii) upon reasonable notice, afford either Buyer's Representatives reasonable access (including the right to make, at Buyers' expense, photocopies), during normal business hours, to such books and records.

(c) Neither Buyers nor Seller shall be obligated to provide the other party or parties with access to any books or records (including personnel files) pursuant to this **Section 6.08** where such access would violate any Law.

Section 6.09. Closing Conditions. From the date hereof until the Closing, each party hereto shall use reasonable best efforts to take such actions as are necessary to expeditiously satisfy the closing conditions set forth in Article VII hereof.

Section 6.10. Public Announcements. Unless otherwise required by applicable Law or stock exchange requirements (based upon the reasonable advice of counsel), no party to this Agreement shall make any public announcements in respect of this Agreement or the transactions contemplated hereby or otherwise communicate with any news media without the prior written consent of the other party (which consent shall not be unreasonably withheld or delayed), and the parties shall cooperate as to the timing and contents of any such announcement.

Section 6.11. Transfer Taxes . All transfer, documentary, sales, use, stamp, registration, value added and other such Taxes and fees (including any penalties and interest) incurred in connection with this Agreement and the other Transaction Documents (including any real property transfer Tax and any other similar Tax) shall be paid equally by Seller and Buyer when due. Seller shall, at its own expense and subject to Buyer approval of the preparation thereof, timely file any Tax Return or other document with respect to such Taxes or fees (and Buyers shall cooperate with respect thereto as necessary).

Section 6.12. Capital Raise. Xenetic shall use commercially reasonable efforts to conduct the Capital Raise and, if the Capital Raise is a public offering, Xenetic will prepare and file a registration statement on Form S-1 (or any successor form) no later than 15 days following the Closing Date with respect to the Capital Raise (or such later date as deemed advisable by the underwriter of the Capital Raise); provided, however, in the event Xenetic reasonably determines that an audit of the activities associated with the Purchased Assets is required to be performed by a registered public account firm pursuant to U.S. federal securities laws in connection with any such registration statement or Xenetic's reporting obligations, the Form S-1 shall be filed no later than 15 days following completion of the audit. Seller shall comply with any and all requests of any kind related to the audit and any delay due to Seller's failure to timely provide any and all responses to auditor's requests shall result in an extension of time in the performance of any obligations of Buyer under this Agreement that is equivalent to the time of the delay plus 30 days. Xenetic shall work diligently to obtain effectiveness of such registration statement, if a public offering, and conduct the Capital Raise as soon as reasonably practicable after effectiveness thereof or otherwise in the case of a private placement. Seller shall timely provide to Buyers all information reasonably requested by either Buyer with respect to Virexxa, Seller and Seller's Affiliates necessary for Xenetic to file such registration statement or prepare such offering documents as may be needed in a private placement (including, any information necessary to complete an audit of Seller and/or the activities associated with the Purchased Assets if so required, and any other information regarding Seller or its Affiliates or the Purchased Assets that is required for inclusion in any registration statement in the event that the Capital Raise is a public offering). Parent or its designees shall purchase in the Capital Raise, or in a private placement concurrent with the Capital Raise in the event of a public offering, such number of shares of Xenetic's common stock equal to the Additional Purchase Amount. After March 31, 2016, in the event Xenetic has been unable, despite using commercially reasonable efforts to do so, to cause the listing of its common stock on a U.S. national stock exchange or on any NASDAQ market tier or any NYSE market tier (including NYSE MKT) (as contemplated by Section 6.15) then, in lieu of the requirements of the immediately preceding sentence, Parent shall loan to Xenetic an amount up to the Additional Purchase Amount at such times and in such increments as requested by Xenetic upon five (5) Business Day written notice (each such loan, a "Further Loan"). Each such Further Loan shall be evidenced by an amendment to the Additional Convertible Note (or an additional note which will be considered included in the term Additional Convertible Note) to reflect a corresponding increase the then-outstanding principal balance thereof.

Further, at or prior to the close of business on the last business day immediately preceding the date of initial closing of the Capital Raise (the “**Measurement Date**”), Parent shall convert the Revised Current Convertible Note and Additional Convertible Note to shares of Xenetic’s common stock in accordance with the conversion terms contained therein, and shall exercise the Current Warrant and Additional Warrant on a cashless exercise basis in accordance with their terms in the event that the stock price of Xenetic Common Stock as of the Measurement Date is above the exercise price on the Current Warrant and the Additional Warrant. In the event that immediately prior to the initial closing of the Capital Raise (should it occur), Parent together with its Affiliates own in the aggregate less than 72% of the outstanding shares of common stock of Xenetic, as determined in accordance with the procedure below, as of the Measurement Date, then as of the date of the initial closing of the Capital Raise Xenetic will issue to Parent additional shares of common stock of Xenetic (the “**New Parent Shares**”). In making such computation for the number of New Parent Shares, the percentage of Xenetic shares held on the Measurement Date shall be determined by computing first, the “**Parent Ownership Amount**,” which is the number of shares of Xenetic common stock held by any of Parent and its Affiliates as of the Measurement Date plus the number of shares of Xenetic common stock issuable to Parent pursuant to its undertaking to purchase the Additional Purchase Amount in the Capital Raise plus the shares of Xenetic common stock issuable to the Parent and its Affiliates with respect to stock options and warrants issued by Xenetic that are “vested and in the money”. For the avoidance of doubt, the Inventor Shares shall not be included in the calculation of either the Parent Ownership Amount or the Xenetic Outstanding Stock. The “**Outstanding Xenetic Stock**” is the sum of (I) the Parent Ownership Amount, plus (II) the sum of the following as of the Measurement Date: (a) all issued and outstanding shares of common stock of Xenetic other than those included in: (i) the Parent Ownership Amount; and (ii) the amount of the Inventors’ Shares (i.e. 11,000,000 shares); plus (b) all shares of common stock of Xenetic issuable to Scott Maguire and Flagship Consulting, Inc. with respect to their accrued, unpaid base compensation; plus (c) the number of shares of Xenetic common stock issuable (and not covered in (a) or (b) immediately above) with respect to all other convertible notes, stock options and warrants issued by Xenetic that are “vested and in the money” (i.e., the exercise or conversion price is at a price per share below the per share price of the stock being sold at the initial closing of the Capital Raise and relates to the vested portion only).

In the event that the quotient of the Parent Ownership Amount divided by the Outstanding Xenetic Stock is less than 72%, then Xenetic, as of the initial closing of the Capital Raise, Xenetic agrees to issue to Parent the New Parent Shares. Where the New Parent Shares is equal to “N” and “N” is calculated as follows:

$$N = (0.72 * Y / 0.28) - (Z / 0.28)$$

In the foregoing computation “Y” is equal to the Xenetic Outstanding Stock and “Z” is equal to the Parent Ownership Amount.

Effective as of the date of funding of the Initial Funding Tranche, Xenetic shall provide to each of Scott Maguire and Flagship Consulting, Inc. the right to convert all of their accrued, unpaid compensation to common stock of Xenetic as of the date hereof and hereafter accruing through the Outside Date (the “**Deferred Salary**”) on pro rata terms to the conversion rights with respect to the Additional Convertible Note and shall provide for accrued interest with respect to the Deferred Salary from the dates of accrual (from time to time) at the same rate of interest as is applicable to the Additional Convertible Note (which shall also be convertible), with all such Deferred Salary coming due on the Outside Date.

Section 6.13. Additional Loan Amount (a) . (i) Within five (5) Business Days following the issuance of the Inventors’ Shares, Parent shall loan to Xenetic \$1.5 million (the “Initial Funding Tranche”) and Xenetic shall issue to Seller the Additional Convertible Note and the Additional Warrant; (ii) within five (5) Business Days of written notice from Xenetic to Parent (provided such notice shall be delivered on or after December 1, 2015) but no later than December 31, 2015, Parent shall have loaned to Xenetic an additional \$1 million which loan shall be evidenced by an amendment to the Additional Convertible Note (or an additional note which will be considered included in the term Additional Convertible Note) to reflect a corresponding increase the then-outstanding principal balance thereof and shall be governed by the terms thereof; and (iii) within five (5) Business Days of written notice from Xenetic to Parent (provided such notice shall be delivered on or after February 1, 2016) but no later than February 28, 2016, Parent shall have loaned to Xenetic an additional \$1 million which loan shall be evidenced by a further amendment to the Additional Convertible Note (or an additional note which will be considered included in the term Additional Convertible Note) to reflect a corresponding increase the then-outstanding principal balance thereof and shall be governed by the terms thereof (with the amounts loaned pursuant to (i)-(iv) of this Section 6.13 being referred to as the “Additional Loan Amount”).

Section 6.14. Further Assurances. Following the Closing, each of the parties hereto shall, and shall cause their respective Affiliates to, execute and deliver such additional documents, instruments, conveyances and assurances and take such further actions as may be reasonably required to carry out the provisions hereof and give effect to the transactions contemplated by this Agreement and the other Transaction Documents.

Section 6.15. Listing. Xenetic shall use commercially reasonable efforts to cause the listing of Xenetic's common stock on a U.S. national stock exchange or on any NASDAQ market tier or any NYSE market tier (including NYSE MKT) as soon as practicable following the initial closing of the Capital Raise, and to that end Seller agrees to cause all of its Affiliates holding Xenetic's common stock to vote in favor of such corporate actions of Xenetic as necessary to effect such listing.

Section 6.16. Securities Restrictions. Until the earliest to occur of the initial closing of the Capital Raise or March 31, 2016 Xenetic shall not, other than pursuant to its obligations under this Agreement: (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Xenetic common stock or any securities convertible into or exercisable or exchangeable for shares of Xenetic's common stock, or file any registration statement under the Securities Act with respect to any of the foregoing; or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of shares of Xenetic's common stock, whether any such swap or transaction described in (i) or (ii) is to be settled by delivery of shares of Xenetic's common stock or such other securities, in cash or otherwise; provided, however, the restrictions in this Section 6.15 shall not apply to: (a) Xenetic raising up to \$1 million in working capital prior to the initial closing of the Capital Raise; or (b) the issuance of stock options authorized for issuance by Buyer at its August 27, 2015 board of directors meeting, or the issuance of common stock upon the exercise of any existing stock options or warrants outstanding as of the date of this Agreement or otherwise contemplated to be issued pursuant to the terms of this Agreement.

Section 6.17. Shareholder Approval. Xenetic shall use its best efforts to obtain any necessary approval by its shareholders in connection with the transactions contemplated by this Agreement. Parent agrees to vote all of its shares of Xenetic common stock and to cause all of its controlled Affiliates to vote their shares of Xenetic common stock in favor of an amendment to Xenetic's Articles of Incorporation to authorize the issuance of up to 1.5 billion shares of common stock and in favor of any reverse stock split proposed by Buyer in order to seek to obtain listing of its common stock on NASDAQ or NYSE MKT.

Section 6.18. Additional Transactions . Following the Capital Raise, Parent intends to create NewCo and, at the written request of Parent, Xenetic and Parent shall undertake the transactions shown in Annex A hereto in a commercially reasonable time frame; provided, however, Parent agrees to be responsible for all costs and expenses incurred by Xenetic in the undertaking of the transactions contemplated by Annex A (including, but not limited to, any regulatory or audit costs and fees associated therewith). To the extent Parent fails to timely pay all such costs and expenses, Xenetic may pay such amounts and then offset such payments against amounts due and owing under the Additional Convertible Note (which, for the avoidance of doubt, shall not constitute a breach of the "Use of Proceeds" requirements set forth in Section 4.9 of the Securities Purchase Agreement). Xenetic agrees that following the creation of NewCo, Xenetic will issue shares of Xenetic on a 1:1 basis (1 new issued share for 1 share of Xenetic owned by NewCo) to holders of NewCo in exchange for all outstanding shares of NewCo (which exchange may occur pursuant to one or more agreements with shareholders of NewCo).

Section 6.19. Conduct of Buyer Operations Prior to Closing. From the date hereof until the Closing, except as otherwise provided in this Agreement or consented to in writing by Buyer (which consent shall not be unreasonably withheld or delayed), Buyers shall (x) conduct the Buyers' business in the ordinary course of business consistent with past practice; and (y) use reasonable best efforts to maintain and preserve intact their current organization, operations and franchise and to preserve the rights, franchises, goodwill and relationships of their employees, customers, lenders, suppliers, regulators and others having relationships with the Buyers' business. Without limiting the foregoing, from the date hereof until the Closing Date, Buyers shall:

(a) preserve and maintain all Permits required for the conduct of the Buyers' business as currently conducted or the ownership and use of the Buyers' assets and properties;

(b) maintain the Buyers' properties and assets in the same condition as they were on the date of this Agreement, subject to reasonable wear and tear;

(c) continue in full force and effect without modification all Buyer Insurance Policies, except as required by applicable Law;

(d) defend and protect the Buyers' properties and assets from infringement or usurpation;

- (e) perform all of its obligations under all Buyer Material Contracts;
- (f) maintain the Books and Records in accordance with past practice;
- (g) continue to maintain all Buyer Intellectual Property set forth in **Section 5.09(a)** of the Disclosure Schedules;
- (h) continue to file and pay any fees due for any Buyer Intellectual Property; and
- (i) comply in all material respects with all Laws applicable to the conduct of the Buyers' business or the ownership and use of the Buyers' assets and properties.

ARTICLE VII

Conditions to closing

Section 7.01. Conditions to Obligations of All Parties. The obligations of each party to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment, at or prior to the Closing, of each of the following conditions and the satisfaction of the closing conditions set forth in Section 7.02 below (except to the extent waived by Buyers) and the satisfaction of the closing conditions set forth in Section 7.03 below (except to the extent waived by Seller), as promptly as practicable following the satisfaction of the conditions set forth below (or waiver by the party in whose favor the closing conditions are made):

(a) No Governmental Authority shall have enacted, issued, promulgated, enforced or entered any Governmental Order which is in effect and has the effect of making the transactions contemplated by this Agreement illegal, otherwise restraining or prohibiting consummation of such transactions or causing any of the transactions contemplated hereunder to be rescinded following completion thereof.

(b) Seller and/or Parent shall have received all consents, authorizations, orders and approvals from the Governmental Authorities referred to in **Section 4.03** and Buyers shall have received all consents, authorizations, orders and approvals from the Governmental Authorities referred to in **Section 5.03**, in each case, in form and substance reasonably satisfactory to Buyers and Seller, and no such consent, authorization, order and approval shall have been revoked; provided however, that any consent, authorization, order or approval that cannot reasonably be determined to have a Material Adverse Effect on a party (as determined in the good faith discretion by the party for whose benefit such consent, authorization, order or approval runs) shall not be required as a condition precedent to Closing.

(c) The Stock Condition shall have been satisfied by way of a shareholders meeting to be held on or before February 28, 2016 by Xenetic. Parent agrees to vote all of its shares of Xenetic common stock and to cause all of its Affiliates to vote their shares of Xenetic common stock in favor of an amendment to Xenetic's Articles of Incorporation to authorize the issuance of up to 1.5 billion shares of common stock (or such other amount as is proposed by Xenetic at its next stockholders meeting) and in favor of any reverse stock split proposed by Xenetic in order to seek to obtain listing of its common stock on NASDAQ or NYSE MKT.

(d) Xenetic and Parent shall have amended and restated the Original Convertible Note and Original Warrant in the form attached hereto as the New Original Convertible Note and Warrant.

Section 7.02. Conditions to Obligations of Buyers. The obligations of Buyers to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment or Buyers' waiver (by Xenetic acting on behalf of Buyers), at or prior to the Closing, of each of the following conditions:

(a) Other than the representations and warranties of Seller or Parent contained in **Section 4.01**, **Section 4.02**, and **Section 4.13**, the representations and warranties of Seller contained in this Agreement shall be true and correct in all respects (in the case of any representation or warranty qualified by materiality or Material Adverse Effect) or in all material respects (in the case of any representation or warranty not qualified by materiality or Material Adverse Effect) on and as of the date hereof and on and as of the Closing Date with the same effect as though made at and as of such date (except those representations and warranties that address matters only as of a specified date, the accuracy of which shall be determined as of that specified date in all respects). The representations and warranties of Seller or Parent contained in **Section 4.01**, **Section 4.02** and **Section 4.13** shall be true and correct in all respects on and as of the date hereof and on and as of the Closing Date with the same effect as though made at and as of such date (except those representations and warranties that address matters only as of a specified date, the accuracy of which shall be determined as of that specified date in all respects).

(b) Each of Seller and Parent shall have duly performed and complied in all material respects with all agreements, covenants and conditions required by this Agreement to be performed or complied with by it prior to or on the Closing Date.

(c) No Action shall have been commenced against Buyers, Seller or Parent, which would prevent the Closing. No injunction or restraining order shall have been issued by any Governmental Authority, and be in effect, which restrains or prohibits any transaction contemplated hereby.

(d) All approvals, consents and waivers that are listed on **Section 4.03** of the Disclosure Schedules shall have been received, and executed counterparts thereof shall have been delivered to Buyers at or prior to the Closing, provided however, that any approval, consent or waiver that cannot reasonably be determined to have a Material Adverse Effect on a party (as determined in the good faith discretion of the party for whose benefit such approval, consent or waiver runs)

(e) From the date of this Agreement, there shall not have occurred any Material Adverse Effect, nor shall any event or events have occurred that, individually or in the aggregate, with or without the lapse of time, would reasonably be expected to result in a Material Adverse Effect.

(f) Seller and Parent shall have delivered to Buyers duly executed counterparts to the Transaction Documents (other than this Agreement) to which it is a party and such other documents and deliveries set forth in **Section 3.02(a)**.

(g) All Encumbrances relating to the Purchased Assets shall have been released in full, other than Permitted Encumbrances, and Seller shall have delivered to Buyers written evidence, in form satisfactory to Buyers in their sole discretion, of the release of any such Encumbrances.

(h) Buyers shall have received a certificate, dated the Closing Date and signed by a duly authorized officer of Seller, that each of the conditions set forth in **Section 7.02(a)** and **Section 7.02(b)** have been satisfied and that all Permits necessary for Seller to continue to operate under the Seller Retained Contracts remain in force and effect (the "**Seller Closing Certificate**").

(i) Buyers shall have received a certificate of the Chief Executive Officer or a Director of Seller certifying that attached thereto are true and complete copies of all resolutions adopted by the board of directors of Seller authorizing the execution, delivery and performance of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby, and that all such resolutions are in full force and effect and are all the resolutions adopted in connection with the transactions contemplated hereby and thereby.

(j) Buyers shall have received a certificate of the Chief Executive Officer or a Director of Seller certifying the names and signatures of the officers of Seller authorized to sign this Agreement, the Transaction Documents and the other documents to be delivered hereunder and thereunder.

(k) Seller shall have delivered to Buyers such other documents or instruments as Buyers reasonably request and are reasonably necessary to consummate the transactions contemplated by this Agreement.

Section 7.03. Conditions to Obligations of Seller and Parent. The obligations of Seller and Parent to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment or Seller's or Parent's waiver, at or prior to the Closing, of each of the following conditions:

(a) Other than the representations and warranties of Buyers contained in **Section 5.01**, **Section 5.02** and **Section 5.04**, the representations and warranties of Buyers contained in this Agreement, the other Transaction Documents and any certificate or other writing delivered pursuant hereto shall be true and correct in all respects (in the case of any representation or warranty qualified by materiality or Material Adverse Effect) or in all material respects (in the case of any representation or warranty not qualified by materiality or Material Adverse Effect) on and as of the date hereof and on and as of the Closing Date with the same effect as though made at and as of such date (except those representations and warranties that address matters only as of a specified date, the accuracy of which shall be determined as of that specified date in all respects). The representations and warranties of Buyers contained in **Section 5.01**, **Section 5.02** and **Section 5.04** shall be true and correct in all respects on and as of the date hereof and on and as of the Closing Date with the same effect as though made at and as of such date.

(b) Buyers shall have duly performed and complied in all material respects with all agreements, covenants and conditions required by this Agreement and each of the other Transaction Documents to be performed or complied with by them prior to or on the Closing Date.

(c) No injunction or restraining order shall have been issued by any Governmental Authority, and be in effect, which restrains or prohibits any material transaction contemplated hereby.

(d) All approvals, consents and waivers that are listed on **Section 5.03** of the Disclosure Schedules shall have been received, and executed counterparts thereof shall have been delivered to Seller at or prior to the Closing.

(e) Buyers shall have delivered to Seller or Parent (as applicable) duly executed counterparts to the Transaction Documents (other than this Agreement) and such other documents and deliveries set forth in **Section 3.02(b)**.

(f) Seller shall have received a certificate, dated the Closing Date and signed by a duly authorized officer of each Buyer, that each of the conditions set forth in **Section 7.03(a)** and **Section 7.03(b)** have been satisfied (the "**Buyer Closing Certificate**").

(g) Seller shall have received a certificate of the Secretary or an Assistant Secretary (or equivalent officer) of each Buyer certifying that attached thereto are true and complete copies of all resolutions adopted by the board of directors of Buyer authorizing the execution, delivery and performance of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby, and that all such resolutions are in full force and effect and are all the resolutions adopted in connection with the transactions contemplated hereby and thereby.

(h) Seller shall have received a certificate of the Secretary or an Assistant Secretary (or equivalent officer) of each Buyer certifying the names and signatures of the officers of Buyer authorized to sign this Agreement, the Transaction Documents and the other documents to be delivered hereunder and thereunder.

(i) Xenetic shall have appointed Dr. Curtis Lockshin as Chief Operating Officer of Xenetic.

(j) Xenetic shall have issued to Parent the shares referenced in Section 2.05(a).

(k) Buyers shall have delivered to Seller such other documents or instruments as Seller reasonably requests and are reasonably necessary to consummate the transactions contemplated by this Agreement.

ARTICLE VIII

Indemnification

Section 8.01. Survival. Subject to the limitations and other provisions of this Agreement, the representations and warranties contained herein shall survive the Closing and shall remain in full force and effect until the date that is two (2) years from the Closing Date; *provided, that* the representations and warranties in Section 4.01, Section 4.02, Section 4.05, Section 4.06, Section 5.01, Section 5.02 and Section 5.04 shall survive until five (5) years from the Closing Date. All covenants and agreements of the parties contained herein shall survive the Closing indefinitely or for the period explicitly specified therein. Notwithstanding the foregoing, any claims asserted in good faith with reasonable specificity (to the extent known at such time) and in writing by notice from the non-breaching party to the breaching party prior to the expiration date of the applicable survival period shall not thereafter be barred by the expiration of the relevant representation or warranty and such claims shall survive until finally resolved.

Section 8.02. Indemnification by Seller and Parent. Subject to the other terms and conditions of this Article VIII, each of Seller and Parent shall, jointly and severally, indemnify and defend each of Buyers and their Affiliates and their respective Representatives (collectively, the “**Buyer Indemnitees**”) against, and shall hold each of them harmless from and against, and shall pay and reimburse each of them for, any and all Losses incurred or sustained by, or imposed upon, the Buyer Indemnitees based upon, arising out of, with respect to or by reason of:

(a) any inaccuracy in or breach of any of the representations or warranties of Seller contained in this Agreement or in any certificate or instrument delivered by or on behalf of Seller pursuant to this Agreement, as of the date such representation or warranty was made or as if such representation or warranty was made on and as of the Closing Date (except for representations and warranties that expressly relate to a specified date, the inaccuracy in or breach of which will be determined with reference to such specified date);

(b) any breach or non-fulfillment of any covenant, agreement or obligation to be performed by Seller pursuant to this Agreement or any of the other Transaction Documents;

(c) any Excluded Asset or any Excluded Liability;

(d) any Third Party Claim based upon, resulting from or arising out of the business, operations, properties, assets or obligations of Seller or any of its Affiliates (other than the Purchased Assets or Assumed Liabilities) conducted, existing or arising on or prior to the Closing Date;

(e) with respect to the Intellectual Property Registrations jointly owned by Seller and Buyers, any Third Party Claim based upon, resulting from or arising out of the business, operations, properties, assets or obligations of Seller or any of its Affiliates (other than the Buyers) conducted, existing or arising on or after the Closing Date.

Section 8.03. Indemnification By Buyers. Subject to the other terms and conditions of this Article VIII, Buyers shall indemnify and defend each of Seller and its Affiliates and their respective Representatives (collectively, the “**Seller Indemnitees**”) against, and shall hold each of them harmless from and against, and shall pay and reimburse each of them for, any and all Losses incurred or sustained by, or imposed upon, the Seller Indemnitees based upon, arising out of, with respect to or by reason of:

(a) any inaccuracy in or breach of any of the representations or warranties of Buyers contained in this Agreement or in any certificate or instrument delivered by or on behalf of Buyers pursuant to this Agreement, as of the date such representation or warranty was made or as if such representation or warranty was made on and as of the Closing Date (except for representations and warranties that expressly relate to a specified date, the inaccuracy in or breach of which will be determined with reference to such specified date);

(b) any breach or non-fulfillment of any covenant, agreement or obligation to be performed by Buyers pursuant to this Agreement or any of the other Transaction Documents;

(c) any Assumed Liability; or

(d) any Third Party Claim based upon, resulting from or arising out of the business, operations, properties, assets or obligations of Buyers or any of their Affiliates conducted, existing or arising on or prior to the Closing Date; or

(e) with respect to the Intellectual Property Registrations jointly owned by Seller and Buyers, any Third Party Claim based upon, resulting from or arising out of the business, operations, properties, assets or obligations of Buyers or any of its Affiliates (other than the Seller or Parent) conducted, existing or arising on or after the Closing Date

Section 8.04. Certain Limitations. The indemnification provided for in Section 8.02 and Section 8.03 shall be subject to the following limitations:

(a) Seller shall not be liable to the Buyer Indemnitees for indemnification under **Section 8.02(a)** (other than with respect to a claim for indemnification based upon, arising out of, with respect to or by reason of any inaccuracy in or breach of any representation or warranty in **Section 4.01, Section 4.02, Section 4.05 and Section 4.06** (the “**Buyer Basket Exclusions**”)), until the aggregate amount of all Losses in respect of indemnification under **Section 8.02(a)** (other than those based upon, arising out of, with respect to or by reason of the Buyer Basket Exclusions) exceeds \$100,000, in which event Seller shall be required to pay or be liable for all such Losses from the first dollar after \$100,000.

(b) Buyers shall not be liable to the Seller Indemnitees for indemnification under **Section 8.03(a)** (other than with respect to a claim for indemnification based upon, arising out of, with respect to or by reason of any inaccuracy in or breach of any representation or warranty in **Section 5.01, Section 5.02 and Section 5.04** (the “**Seller Basket Exclusions**”)) until the aggregate amount of all Losses in respect of indemnification under **Section 8.03(a)** (other than those based upon, arising out of, with respect to or by reason of the Seller Basket Exclusions) exceeds \$100,000, in which event Buyers shall be required to pay or be liable for all such Losses from the first dollar after \$100,000.

(c) For purposes of this Article VIII, any inaccuracy in or breach of any representation or warranty shall be determined without regard to any materiality, Material Adverse Effect or other similar qualification contained in or otherwise applicable to such representation or warranty.

(d) Notwithstanding anything to the contrary, in no event shall Seller and Parent, on the one hand, or Buyers, on the other hand be liable under this Article VIII for Losses exceeding \$4,000,000.

Section 8.05. Indemnification Procedures. The party making a claim under this Article VIII is referred to as the “**Indemnified Party**” and the party against whom such claims are asserted under this Article VIII is referred to as the “**Indemnifying Party**.”

(a) **Third Party Claims.** If any Indemnified Party receives notice of the assertion or commencement of any Action made or brought by any Person who is not a party to this Agreement or an Affiliate of a party to this Agreement or a Representative of the foregoing (a “**Third Party Claim**”) against such Indemnified Party with respect to which the Indemnifying Party is obligated to provide indemnification under this Agreement, the Indemnified Party shall give the Indemnifying Party reasonably prompt written notice thereof, but in any event not later than 10 calendar days after receipt of such notice of such Third Party Claim. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits rights or defenses by reason of such failure. Such notice by the Indemnified Party shall describe the Third Party Claim in reasonable detail, shall include copies of all material written evidence thereof and shall indicate the estimated amount, if reasonably practicable, of the Loss that has been or may be sustained by the Indemnified Party. The Indemnifying Party shall have the right to participate in, or by giving written notice to the Indemnified Party, to assume the defense of any Third Party Claim at the Indemnifying Party’s expense and by the Indemnifying Party’s own counsel, and the Indemnified Party shall cooperate in good faith in such defense. In the event that the Indemnifying Party assumes the defense of any Third Party Claim, subject to **Section 8.05(b)**, it shall have the right to take such action as it deems necessary to avoid, dispute, defend, appeal or make counterclaims pertaining to any such Third Party Claim in the name and on behalf of the Indemnified Party. The Indemnified Party shall have the right to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party’s right to control the defense thereof. The fees and disbursements of such counsel shall be at the expense of the Indemnified Party, *provided, that* if in the reasonable opinion of counsel to the Indemnified Party, (A) there are legal defenses available to an Indemnified Party that are different from or additional to those available to the Indemnifying Party; or (B) there exists a conflict of interest between the Indemnifying Party and the Indemnified Party that cannot be waived, the Indemnifying Party shall be liable for the reasonable fees and expenses of one counsel to the Indemnified Party. If the Indemnifying Party elects not to compromise or defend such Third Party Claim or fails to promptly notify the Indemnified Party in writing of its election to defend as provided in this Agreement, the Indemnified Party may, upon prior written consent of the Indemnifying Party (such consent not to be unreasonably withheld), subject to **Section 8.05(b)**, pay, compromise, defend such Third Party Claim and seek indemnification for any and all Losses based upon, arising from or relating to such Third Party Claim. Seller and Buyers shall cooperate with each other in all reasonable respects in connection with the defense of any Third Party Claim, including making available (subject to the provisions of **Section 6.05**) records relating to such Third Party Claim and furnishing, without expense (other than reimbursement of actual out-of-pocket expenses) to the defending party, management employees of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim.

(b) **Settlement of Third Party Claims.** Notwithstanding any other provision of this Agreement, the Indemnifying Party shall not enter into settlement of any Third Party Claim without the prior written consent of the Indemnified Party (such consent not to be unreasonably withheld), except as provided in this **Section 8.05(b)**. If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation on the part of the Indemnified Party and provides, in customary form, for the unconditional release of each Indemnified Party from all liabilities and obligations in connection with such Third Party Claim and the Indemnifying Party desires to accept and agree to such offer, the Indemnifying Party shall give written notice to that effect to the Indemnified Party. If the Indemnified Party fails to consent to such firm offer within ten days after its receipt of such notice, the Indemnified Party may continue to contest or defend such Third Party Claim and in such event, the maximum liability of the Indemnifying Party as to such Third Party Claim shall not exceed the amount of such settlement offer. If the Indemnified Party fails to consent to such firm offer and also fails to assume defense of such Third Party Claim, the Indemnifying Party may settle the Third Party Claim upon the terms set forth in such firm offer to settle such Third Party Claim. If the Indemnified Party has assumed the defense pursuant to **Section 8.05(a)**, it shall not agree to any settlement without the written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

(c) **Direct Claims.** Any Action by an Indemnified Party on account of a Loss which does not result from a Third Party Claim (a "**Direct Claim**") shall be asserted by the Indemnified Party giving the Indemnifying Party reasonably prompt written notice thereof, but in any event not later than 30 days after the Indemnified Party becomes aware of such Direct Claim. The failure to give such prompt written notice shall not, however, relieve the Indemnifying Party of its indemnification obligations, except and only to the extent that the Indemnifying Party forfeits rights or defenses by reason of such failure. Such notice by the Indemnified Party shall describe the Direct Claim in reasonable detail, shall include copies of all material written evidence thereof and shall indicate the estimated amount, if reasonably practicable, of the Loss that has been or may be sustained by the Indemnified Party. The Indemnifying Party shall have 30 days after its receipt of such notice to respond in writing to such Direct Claim. The Indemnified Party shall allow the Indemnifying Party and its professional advisors to investigate the matter or circumstance alleged to give rise to the Direct Claim, and whether and to what extent any amount is payable in respect of the Direct Claim and the Indemnified Party shall assist the Indemnifying Party's investigation by giving such information and assistance (including access to the Indemnified Party's premises and personnel and the right to examine and copy any accounts, documents or records) as the Indemnifying Party or any of its professional advisors may reasonably request. If the Indemnifying Party does not so respond within such 30 day period, the Indemnifying Party shall be deemed to have rejected such claim, in which case the Indemnified Party shall be free to pursue such remedies as may be available to the Indemnified Party on the terms and subject to the provisions of this Agreement.

(d) **Cooperation, Mitigation.** Upon a reasonable request by the Indemnifying Party, each Indemnified Party seeking indemnification hereunder in respect of any Direct Claim, hereby agrees to consult with the Indemnifying Party and act reasonably to take actions reasonably requested by the Indemnifying Party in order to attempt to reduce the amount of Losses in respect of such Direct Claim. Any costs or expenses associated with taking such actions shall be included as Losses hereunder. Each Party shall be obligated to use reasonable good faith efforts to take actions which would mitigate the liability of an Indemnifying Party, to the extent that such mitigation efforts will not require it to expend in excess of \$25,000.

Section 8.06. Payments. Once a Loss is agreed to by the Indemnifying Party or finally adjudicated to be payable pursuant to this Article VIII, the Indemnifying Party shall satisfy its obligations within 15 Business Days of such final, non-appealable adjudication by wire transfer of immediately available funds. Further, the Buyer Indemnitees may, in their sole discretion offset any agreed-to Loss against amounts due and owing under the Additional Convertible Note. The parties hereto agree that should an Indemnifying Party not make full payment of any such obligations within such 15 Business Day period, any amount payable shall accrue interest from and including the date of agreement of the Indemnifying Party or final, non-appealable adjudication to and including the date such payment has been made at a rate per annum equal to the prime rate of interest as announced by Bank of America (or any successor entity) on the last day of such 15 Business Day period. Such interest shall be calculated daily on the basis of a 365 day year and the actual number of days elapsed, without compounding.

Section 8.07. Tax Treatment of Indemnification Payments. All indemnification payments made under this Agreement shall be treated by the parties as an adjustment to the Purchase Price for Tax purposes, unless otherwise required by Law.

Section 8.08. Effect of Investigation. The representations, warranties and covenants of the Indemnifying Party, and the Indemnified Party's right to indemnification with respect thereto, shall not be affected or deemed waived by reason of any investigation made by or on behalf of the Indemnified Party (including by any of its Representatives) or by reason of the fact that the Indemnified Party or any of its Representatives knew or should have known that any such representation or warranty is, was or might be inaccurate or by reason of the Indemnified Party's waiver of any condition set forth in Section 7.02 or Section 7.03, as the case may be.

Section 8.09. Exclusive Remedies. Subject to Section 6.06 and Section 10.11, the parties acknowledge and agree that their sole and exclusive remedy with respect to any and all claims (other than claims arising from fraud, criminal activity or willful misconduct on the part of a party hereto in connection with the transactions contemplated by this Agreement) for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement, shall be pursuant to the indemnification provisions set forth in this Article VIII. In furtherance of the foregoing, each party hereby waives, to the fullest extent permitted under Law, any and all rights, claims and causes of action for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement it may have against the other parties hereto and their Affiliates and each of their respective Representatives arising under or based upon any Law, except pursuant to the indemnification provisions set forth in this Article VIII. Nothing in this Section 8.09 shall limit any Person's right to seek and obtain any equitable relief to which any Person shall be entitled or to seek any remedy on account of any Person's fraudulent, criminal or intentional misconduct.

ARTICLE IX

Termination

Section 9.01. Termination. This Agreement may be terminated at any time prior to the Closing:

(a) by the mutual written consent of Seller and Buyers;

(b) by Buyers by written notice to Seller if:

(i) Buyers are not then in material breach of any provision of this Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by Seller pursuant to this Agreement that would give rise to the failure of any of the conditions specified in Article VII and such breach, inaccuracy or failure has not been cured by Seller within 15 days of Seller's receipt of written notice of such breach from Buyers; or

(ii) any of the conditions set forth in **Section 7.01** or **Section 7.02** shall not have been, or if it becomes apparent that any of such conditions will not be, fulfilled by February 28, 2016 unless such failure shall be due to the failure of Buyers to perform or comply with any of the covenants, agreements or conditions hereof to be performed or complied with by it prior to the Closing;

(c) by Seller or Parent by written notice to Buyers if:

(i) Neither Seller nor Parent is then in material breach of any provision of this Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by one or more of Buyers pursuant to this Agreement that would give rise to the failure of any of the conditions specified in Article VII and such breach, inaccuracy or failure has not been cured by the applicable Buyers within ten days of their receipt of written notice of such breach from Seller; or

(ii) any of the conditions set forth in **Section 7.01** or **Section 7.03** shall not have been, or if it becomes apparent that any of such conditions will not be, fulfilled by February 28, 2016 unless such failure shall be due to the failure of Seller or Parent to perform or comply with any of the covenants, agreements or conditions hereof to be performed or complied with by it prior to the Closing; or

(d) by Buyers or Seller in the event that (i) there shall be any Law that makes consummation of the transactions contemplated by this Agreement illegal or otherwise prohibited or (ii) any Governmental Authority shall have issued a Governmental Order restraining or enjoining the transactions contemplated by this Agreement, and such Governmental Order shall have become final and non-appealable.

Section 9.02. Effect of Termination. In the event of the termination of this Agreement in accordance with this Article, this Agreement shall forthwith become void and there shall be no liability on the part of any party hereto except:

(a) as set forth in this **Article IX** and **Section 6.05** and **Article X** hereof; and

(b) that nothing herein shall relieve any party hereto from liability for any willful breach of any provision hereof.

ARTICLE X

Miscellaneous

Section 10.01. Expenses. Except as otherwise expressly provided herein, all costs and expenses, including, without limitation, fees and disbursements of counsel, financial advisors and accountants, incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such costs and expenses, whether or not the Closing shall have occurred.

Section 10.02. Notices. All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by facsimile or e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient or (d) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section 10.02):

If to Seller: AS Kevelt
Teaduspargi 3/1, 12618,
Tallinn, Estonia,
E-mail a.ahtloo@kevelt.ee
Attention: Allan Ahtloo, management board member

Parent: OJSC Pharmsynthez
IT Park, 25 Liter ZH
Krasnogo Kursanta, ul.
St. Petersburg, Russia 19-7110
Facsimile: 7 (8 12) 329-8089
E-mail: pkruglyakov@pharmsynthez.com
Attention: Peter V. Kruglyakov, CEO

with a copy to: Covington & Burling LLP
The New York Times Building
620 Eighth Avenue
New York, New York 10018
Facsimile: (646) 441-9113
Email: eblanchard@cov.com
Attention: Eric Blanchard

If to either Buyer: Attn. Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Mass. 02421
Facsimile: 781-538-4327
E-mail: s.maguire@xeneticbio.com
Attention: Scott Maguire, CEO

with a copy to: Taft, Stettinius & Hollister LLP
111 E. Wacker Drive, Suite 2800
Chicago, IL 60601
Facsimile: 312-275-7569
E-mail: mgoldsmith@taftlaw.com
Attention: Mitchell D. Goldsmith, Esq.

Section 10.03. Interpretation, English Version Controls. For purposes of this Agreement, (a) the words “include,” “includes” and “including” shall be deemed to be followed by the words “without limitation;” (b) the word “or” is not exclusive; and (c) the words “herein,” “hereof,” “hereby,” “hereto” and “hereunder” refer to this Agreement as a whole. Unless the context otherwise requires, references herein: (x) to Articles, Sections, Disclosure Schedules and Exhibits mean the Articles and sections of, and Disclosure Schedules and Exhibits attached to, this Agreement; (y) to an agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and (z) to a statute means such statute as amended from time to time and includes any successor legislation thereto and any regulations promulgated thereunder. This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted. The Disclosure Schedules and Exhibits referred to herein shall be construed with, and as an integral part of, this Agreement to the same extent as if they were set forth verbatim herein. In the event that this Agreement is translated into a language other than English (including but not limited to Russian or Estonian), the English version of this Agreement shall control and be the governing document with respect to any dispute regarding the terms of this Agreement.

Section 10.04. Headings. The headings in this Agreement are for reference only and shall not affect the interpretation of this Agreement.

Section 10.05. Severability. If any term or provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction. Except as provided in Section 6.06(d), upon such determination that any term or other provision is invalid, illegal or unenforceable, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.

Section 10.06. Entire Agreement. This Agreement and the other Transaction Documents constitute the sole and entire agreement of the parties to this Agreement with respect to the subject matter contained herein and therein, and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter. In the event of any inconsistency between the statements in the body of this Agreement and those in the other Transaction Documents, the Exhibits and Disclosure Schedules (other than an exception expressly set forth as such in the Disclosure Schedules), the statements in the body of this Agreement will control.

Section 10.07. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns. Neither party may assign its rights or obligations hereunder without the prior written consent of the other party, which consent shall not be unreasonably withheld or delayed; *provided, however*, that prior to the Closing Date, Buyers may, without the prior written consent of Seller, assign all or any portion of their rights under this Agreement to one or more of its direct or indirect wholly-owned subsidiaries. No assignment shall relieve the assigning party of any of its obligations hereunder.

Section 10.08. No Third-party Beneficiaries. Except as provided in Article VIII, this Agreement is for the sole benefit of the parties hereto and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

Section 10.09. Amendment and Modification; Waiver. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by each party hereto. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any right, remedy, power or privilege arising from this Agreement shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

Section 10.10. Governing Law; Submission to Jurisdiction; Waiver of Jury Trial.

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

(b) ANY LEGAL SUIT, ACTION OR PROCEEDING ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY MAY BE INSTITUTED IN THE FEDERAL COURTS OF THE UNITED STATES OF AMERICA OR THE COURTS OF THE STATE OF MASSACHUSETTS IN EACH CASE LOCATED IN THE CITY OF BOSTON, AND EACH PARTY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS IN ANY SUCH SUIT, ACTION OR PROCEEDING. SERVICE OF PROCESS, SUMMONS, NOTICE OR OTHER DOCUMENT BY MAIL TO SUCH PARTY'S ADDRESS SET FORTH HEREIN SHALL BE EFFECTIVE SERVICE OF PROCESS FOR ANY SUIT, ACTION OR OTHER PROCEEDING BROUGHT IN ANY SUCH COURT. THE PARTIES IRREVOCABLY AND UNCONDITIONALLY WAIVE ANY OBJECTION TO THE LAYING OF VENUE OF ANY SUIT, ACTION OR ANY PROCEEDING IN SUCH COURTS AND IRREVOCABLY WAIVE AND AGREE NOT TO PLEAD OR CLAIM IN ANY SUCH COURT THAT ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(c) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS **SECTION 10.10(c)**.

Section 10.11. Specific Performance. The parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the parties shall be entitled to seek specific performance of the terms hereof, in addition to any other remedy to which they are entitled at law or in equity.

Section 10.12. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[SIGNATURE PAGE FOLLOWS]

SELLER:

AS KEVELT

By _____
Name:
Title:

PARENT:

OJSC PHARMSYNTHETZ

By _____
Name:
Title:

BUYERS:

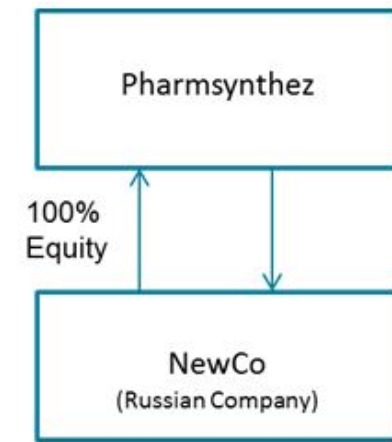
XENETIC BIOSCIENCES, INC.

By /s/ M. Scott Maguire
Name: M. Scott Maguire
Title: Chief Executive Officer

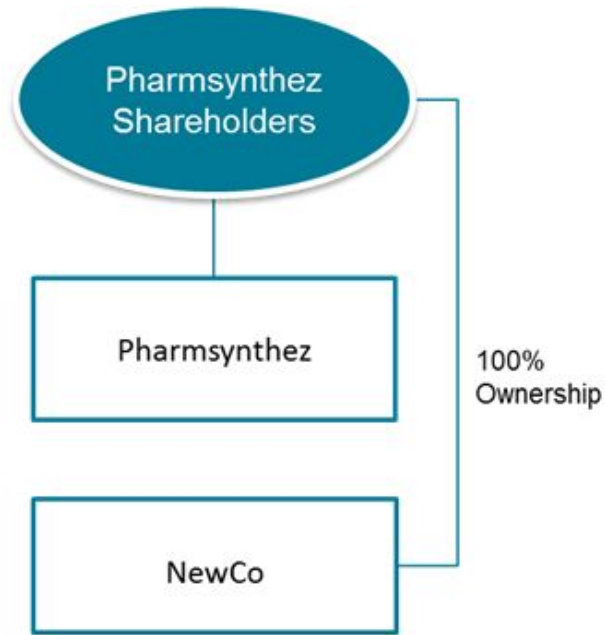
LIPOXEN TECHNOLOGIES, INC.

By _____
Name: M. Scott Maguire
Title: Chief Executive Officer

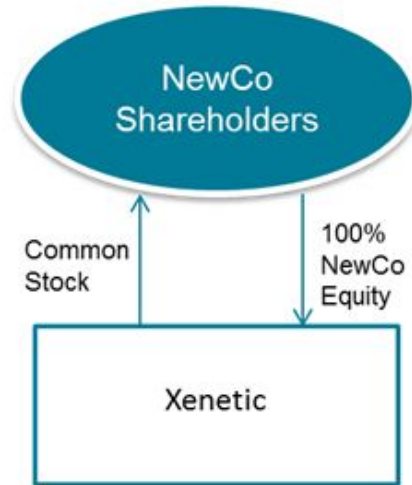
Step 1: Creation of and Transfer of Securities to NewCo



Step 2: NewCo Spin-off



Step 3: Xenetic Exchanges Shares for Shares of NewCo



NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS CONVERTIBLE 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 SECURITY AND THE SECURITIES ISSUABLE UPON CONVERSION OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

Original Issue Date: [____], 201[]

Original Conversion Price (subject to adjustment herein): **\$0.15**

Principal Amount: \$[_____]

FORM OF
TEN PERCENT (10%) SENIOR SECURED COLLATERALIZED
CONVERTIBLE PROMISSORY NOTE
DUE _____

THIS TEN PERCENT (10%) SENIOR SECURED COLLATERALIZED CONVERTIBLE PROMISSORY NOTE is a duly authorized and validly issued Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note of Xenetic Biosciences, Inc., a Nevada corporation (the "Company" or the "Borrower"), having its principal place of business at 99 Hayden Ave, Suite 230, Lexington, Massachusetts 02421, designated as its Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due (the "Note").

FOR VALUE RECEIVED, the Company promises to pay to OJSC Pharmsynthez or its registered assigns (the "Holder"), or shall have paid pursuant to the terms hereunder, the principal sum of \$[_____] on the Outside Date (as defined in the Asset Purchase Agreement) (the "Maturity Date") or such earlier date as this Note is required or permitted to be repaid as provided hereunder, and to pay interest to the Holder on the aggregate unconverted and then outstanding principal amount of this Note in accordance with the provisions hereof. This Note is subject to the following additional provisions:

Section 1. Definitions. For the purposes hereof, in addition to the terms defined elsewhere in this Note, (a) capitalized terms not otherwise defined herein shall have the meanings set forth in the Securities Purchase Agreement and (b) the following terms shall have the following meanings:

“Alternate Consideration” shall have the meaning set forth in Section 5(f).

“Asset Purchase Agreement” shall mean that certain Asset Purchase Agreement, dated as of November [], 2015, among AS KEVELT, an Estonian company (“Seller”), OJSC PHARMSYNTHETZ, a Russian pharmaceutical company and parent of Seller, the Company and LIPOXEN TECHNOLOGIES, LTD., a U.K. corporation.

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

“Base Conversion Price” shall have the meaning set forth in Section 5(b).

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

“Buy-In” shall have the meaning set forth in Section 4(c)(v).

“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Company, by contract or otherwise) of in excess of 50% of the voting securities of the Company (other than by means of conversion or exercise of the Note and the Securities issued together with the Note), (b) the Company merges into or consolidates with any other Person, or any Person merges into or consolidates with the Company and, after giving effect to such transaction, the stockholders of the Company immediately prior to such transaction own less than 50% of the aggregate voting power of the Company or the successor entity of such transaction, (c) the Company sells or transfers all or substantially all of its assets to another Person and the stockholders of the Company immediately prior to such transaction own less than 50% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a three year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the date hereof), or (e) the execution by the Company of an agreement to which the Company is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Conversion” shall have the meaning ascribed to such term in Section 4.

“Conversion Date” shall have the meaning set forth in Section 4(a).

“Conversion Price” shall have the meaning set forth in Section 4(b).

“Conversion Schedule” means the Conversion Schedule in the form of Schedule 1 attached hereto.

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

“Dilutive Issuance” shall have the meaning set forth in Section 5(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 5(b).

“DTC” means the Depository Trust Company.

“DTC/FAST Program” means the DTC’s Fast Automated Securities Transfer Program.

“DWAC” means Deposit Withdrawal at Custodian as defined by the DTC.

“DWAC Eligible” means that (a) the Common Stock is eligible at DTC for full services pursuant to DTC’s Operational Arrangements, including without limitation transfer through DTC’s DWAC system, (b) the Company has been approved (without revocation) by the DTC’s underwriting department, (c) the Transfer Agent is approved as an agent in the DTC/FAST Program, (d) the Conversion Shares are otherwise eligible for delivery via DWAC, and (e) the Transfer Agent does not have a policy prohibiting or limiting delivery of the Conversion Shares via DWAC.

“Effectiveness Period” shall have the meaning set forth in the Registration Rights Agreement.

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

“Fundamental Transaction” shall have the meaning set forth in Section 5(f).

“Late Fees” shall have the meaning set forth in Section 2(d).

“Make-Whole Amount” means, with respect to the applicable date of determination, an amount in cash equal to all of the interest that, but for the applicable conversion or default payment, would have accrued pursuant to Section 2 with respect to the applicable principal amount being so converted or redeemed for the period commencing on the applicable redemption date or Conversion Date or default payment date and ending on the Maturity Date.

“Mandatory Default Amount” means the payment of all outstanding principal and accrued interest, with accrued interest defined as set forth in Section 2(c).

“New York Courts” shall have the meaning set forth in Section 8(d).

“Note Register” shall have the meaning set forth in Section 2(c).

“Notice of Conversion” shall have the meaning set forth in Section 4(a).

“Original Issue Date” means the date of the first issuance of the Note, regardless of any transfers of any Note and regardless of the number of instruments which may be issued to evidence such Note.

“Permitted Indebtedness” means the indebtedness evidenced by the Note.

“Permitted Lien” means the individual and collective reference to the following: (a) Liens for taxes, assessments and other governmental charges or levies not yet due or Liens for taxes, assessments and other governmental charges or levies being contested in good faith and by appropriate proceedings for which adequate reserves (in the good faith judgment of the management of the Company) have been established in accordance with GAAP, (b) Liens imposed by law which were incurred in the ordinary course of the Company’s business, such as carriers’, warehousemen’s and mechanics’ Liens, statutory landlords’ Liens, and other similar Liens arising in the ordinary course of the Company’s business, and which (x) do not individually or in the aggregate materially detract from the value of such property or assets or materially impair the use thereof in the operation of the business of the Company and its consolidated Subsidiaries or (y) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing for the foreseeable future the forfeiture or sale of the property or asset subject to such Lien and (c) Liens incurred in connection with Permitted Indebtedness.

“Registration Rights Agreement” means the Registration Rights Agreement, dated as of the date of the Securities Purchase Agreement, among the Company and the original Holder, in the form of Exhibit B attached to the Securities Purchase Agreement.

“Registration Statement” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale of the Underlying Shares by each Holder as provided for in the Registration Rights Agreement.

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

“Securities Purchase Agreement” means the Securities Purchase Agreement, dated as of June 9, 2015, as amended, modified or supplemented from time to time in accordance with its terms.

“Share Delivery Date” shall have the meaning set forth in Section 4(c)(ii).

“Successor Entity” shall have the meaning set forth in Section 5(f).

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

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

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTC Bulletin Board is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

Section 2. Interest.

a) Payment of Interest in Cash or Kind. The Company shall pay interest to the Holder on the aggregate unconverted and then outstanding principal amount of this Note at the rate of 10% per annum, payable quarterly (as to that principal amount then being converted) and on the Maturity Date in cash or, at the Company's option, in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock or a combination thereof at the lesser of \$0.15 or the then applicable conversion price.

b) Interest Calculations. Interest shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar day periods, and shall accrue daily commencing on the Original Issue Date until payment in full of the outstanding principal, together with all accrued and unpaid interest, liquidated damages and other amounts which may become due hereunder, has been made. Payment of interest in shares of Common Stock shall otherwise occur pursuant to Section 4(c)(ii) herein. Interest hereunder will be paid to the Person in whose name this Note is registered on the records of the Company regarding registration and transfers of this Note (the "Note Register"). Except as otherwise provided herein, if at any time the Company pays interest partially in cash and partially in shares of Common Stock to the holder of the Note, then such payment of cash shall be distributed ratably among the holders of the then-outstanding Note based on their (or their predecessor's) initial purchases of Note pursuant to the Securities Purchase Agreement.

c) Late Fee. All overdue accrued and unpaid interest to be paid hereunder shall entail a late fee at an interest rate equal to the lesser of 18% per annum or the maximum rate permitted by applicable law (the "Late Fees") which shall accrue daily from the date such interest is due hereunder through and including the date of actual payment in full.

d) Reserved.

e) Prepayment. Subject to Section 7 herein, prior to the one (1) year anniversary of the Original Issue Date, but not before the six (6) month anniversary of the Original Issue Date, upon ten (10) days written notice to the Holder, the Company may prepay any portion of the principal amount of this Note and any accrued and unpaid interest. If the Borrower exercises its right to prepay the Note, the Borrower shall make payment to the Holder of an amount in cash equal to the sum of the then outstanding principal amount of this Note and interest multiplied by 115%. The Holder may continue to convert the Note from the date notice of the prepayment is given until the date of the prepayment.

Section 3. Registration of Transfers and Exchanges.

a) Different Denominations. This Note is exchangeable for an equal aggregate principal amount of Notes of different authorized denominations, as requested by the Holder surrendering the same. No service charge will be payable for such registration of transfer or exchange.

b) Investment Representations. This Note has been issued subject to certain investment representations of the original Holder, which representations are set forth in the Securities Purchase Agreement and made again by Holder as of the date of this Note. This Note may be transferred or exchanged only in compliance with the Securities Purchase Agreement and applicable federal and state securities laws and regulations.

c) Reliance on Note Register. Prior to due presentment for transfer to the Company of this Note, the Company and any agent of the Company may treat the Person in whose name this Note is duly registered on the Note Register as the owner hereof for the purpose of receiving payment as herein provided and for all other purposes, whether or not this Note is overdue, and neither the Company nor any such agent shall be affected by notice to the contrary.

Section 4. Conversion.

a) Voluntary Conversion. This Note shall be convertible, in whole or in part, into shares of Common Stock at the option of the Holder, at any time and from time to time. The Holder shall effect conversions by delivering to the Company a Notice of Conversion, the form of which is attached hereto as Annex A (each, a "Notice of Conversion"), specifying therein the principal amount of this Note to be converted and accrued interest as of the date on which such conversion shall be effected (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. To effect conversions hereunder, the Holder shall not be required to physically surrender this Note to the Company unless the entire principal amount of this Note, plus all accrued and unpaid interest thereon, has been so converted. Conversions hereunder shall have the effect of lowering the outstanding principal amount of this Note in an amount equal to the applicable conversion. The Holder and the Company shall maintain records showing the principal amount(s) converted and the date of such conversion(s). The Company may deliver an objection to any Notice of Conversion within one (1) Business Day of delivery of such Notice of Conversion. In the event of any dispute or discrepancy, the records of the Holder shall be controlling and determinative in the absence of manifest error. **The Holder, and any assignee by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note may be less than the amount stated on the face hereof.**

b) Conversion Price. The conversion price in effect on any Conversion Date shall be equal to **\$0.15** (the "Conversion Price"). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such measuring period. Nothing herein shall limit a Holder's right to pursue actual damages or declare an Event of Default pursuant to Section 6 hereof and the Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

c) Mechanics of Conversion.

i . Conversion Shares Issuable Upon Conversion of Principal Amount. The number of Conversion Shares issuable upon a conversion hereunder shall be determined by the quotient obtained by dividing (x) the outstanding principal amount of this Note to be converted by (y) the Conversion Price.

i i . Delivery of Certificate Upon Conversion. Not later than three (3) Trading Days after each Conversion Date (the “Share Delivery Date”), the Company shall deliver, or cause to be delivered, to the Holder (A) a certificate or certificates representing the Conversion Shares which, on or after the earlier of (i) the six month anniversary of the Original Issue Date or (ii) the Effective Date, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Securities Purchase Agreement) representing the number of Conversion Shares being acquired upon the conversion of this Note, (B) a bank check in the amount of accrued and unpaid interest (if the Company has elected or is required to pay accrued interest in cash) and (C) a bank check in the amount of the Make-Whole Amount. All certificate or certificates required to be delivered by the Company under this Section 4(c) shall be delivered electronically through the Depository Trust Company or another established clearing corporation performing similar functions. If the Conversion Date is prior to the earlier of (i) the six month anniversary of the Original Issue Date or (ii) the Effective Date, then the Conversion Shares shall bear a restrictive legend in the following form, as appropriate:

“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

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

iv. Obligation Absolute; Partial Liquidated Damages. The Company's obligations to issue and deliver the Conversion Shares upon conversion of this Note 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 such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Company of any such action the Company may have against the Holder. In the event the Holder of this Note shall elect to convert any or all of the outstanding principal amount hereof, the Company may not refuse conversion based on any claim that the Holder or anyone associated or affiliated with the Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and or enjoining conversion of all or part of this Note shall have been sought and obtained, and the Company posts a surety bond for the benefit of the Holder in the amount of 150% of the outstanding principal amount of this Note, which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to the Holder to the extent it obtains judgment. In the absence of such injunction, the Company shall issue Conversion Shares or, if applicable, cash, upon a properly noticed conversion. If the Company fails for any reason to deliver to the Holder such certificate or certificates pursuant to Section 4(c)(ii) by the Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of principal amount being converted, \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Share Delivery Date until such certificates are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages or declare an Event of Default pursuant to Section 6 hereof for the Company's failure to deliver Conversion Shares within the period specified herein and the Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

v. Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. In addition to any other rights available to the Holder, if the Company fails for any reason to deliver to the Holder such certificate or certificates by the Share Delivery Date pursuant to Section 4(c)(ii), and if after such Share Delivery Date the Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Conversion Shares which the Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Company shall (A) pay in cash to the Holder (in addition to any other remedies available to or elected by the Holder) the amount, if any, by which (x) the Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that the Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of the Holder, either reissue (if surrendered) this Note in a principal amount equal to the principal amount of the attempted conversion (in which case such conversion shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued if the Company had timely complied with its delivery requirements under Section 4(c)(ii). For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of this Note with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Company shall be required to pay the Holder \$1,000. 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. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon conversion of this Note as required pursuant to the terms hereof.

vi. Reservation of Shares Issuable Upon Conversion. The Company covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock a number of shares of Common Stock at least equal to 200% of the Required Minimum (to be adjusted quarterly) for the sole purpose of covering the Underlying Shares (subject to the terms and conditions set forth in the Securities Purchase Agreement). The Company covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable and, if the Registration Statement is then effective under the Securities Act, shall be registered for public resale in accordance with such Registration Statement (subject to such Holder's compliance with its obligations under the Section 4.17 of the Securities Purchase Agreement).

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

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

Section 5. Certain Adjustments.

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

b) Subsequent Equity Sales. If, at any time while this Note is outstanding, the Company or any Subsidiary, as applicable, sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower (after accounting for stock splits and similar adjustments) than the then Conversion Price (such lower price, the “Base Conversion Price” and such issuances, collectively, a “Dilutive Issuance”) (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 5(b) in respect of an Exempt Issuance. If the Company enters into a Variable Rate Transaction, despite the prohibition set forth in the Securities Purchase Agreement, the Company shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible conversion price at which such securities may be converted or exercised. The Company shall notify the Holder in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 5(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the “Dilutive Issuance Notice”). For purposes of clarification, whether or not the Company provides a Dilutive Issuance Notice pursuant to this Section 5(b), upon the occurrence of any Dilutive Issuance, the Holder is entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether the Holder accurately refers to the Base Conversion Price in the Notice of Conversion.

c) Preemptive Rights.

i. From the date hereof until the date that is the 12-month anniversary of the last Closing, upon any issuance by the Company of Common Stock, Common Stock Equivalents or debt for cash consideration, Indebtedness or a combination of units thereof (a “Subsequent Financing”), the Holder shall have the right to participate in an amount equal to up to 100% of the Subsequent Financing (the “Participation Maximum”) on the same terms, conditions and price provided for in the Subsequent Financing.

ii. At least five (5) Trading Days prior to the closing of the Subsequent Financing, the Company shall deliver to the Holder a written notice of its intention to effect a Subsequent Financing (“Pre-Notice”), which Pre-Notice shall ask the Holder if it wants to review the details of such financing (such additional notice, a “Subsequent Financing Notice”). Upon the request of the Holder, and only upon a request by the Holder, for a Subsequent Financing Notice, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver a Subsequent Financing Notice to the Holder. The Subsequent Financing Notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet or similar document relating thereto as an attachment.

iii. If the Holder desires to participate in such Subsequent Financing, the Holder must provide written notice to the Company that the Holder is willing to participate in the Subsequent Financing, the amount of the Holder’s participation, and representing and warranting that the Holder has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice.

iv. If notifications by the Holder of its willingness to participate in the Subsequent Financing (or to cause their designees to participate) is, in the aggregate, less than the total amount of the Subsequent Financing, then the Company may effect the remaining portion of such Subsequent Financing on the terms and with the Persons set forth in the Subsequent Financing Notice.

v. The Company must provide the Holder with a second Subsequent Financing Notice, and the Holder will again have the right of participation set forth above in this Section 5(c), if the Subsequent Financing subject to the initial Subsequent Financing Notice is not consummated for any reason on the terms set forth in such Subsequent Financing Notice within thirty (30) Trading Days after the date of the initial Subsequent Financing Notice.

vi. The Company and the Holder agree that if the Holder elects to participate in the Subsequent Financing, the transaction documents related to the Subsequent Financing shall not include any term or provision whereby the Holder shall be required to agree to any restrictions on trading as to any of the Securities purchased hereunder or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, this Agreement, without the prior written consent of such Holder.

vii. Notwithstanding anything to the contrary in this Section 5(c) and unless otherwise agreed to by the Holder, the Company shall either confirm in writing to the Holder that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that such Holder will not be in possession of any material, non-public information, by the tenth (10th) Trading Day following delivery of the Subsequent Financing Notice. If by such tenth (10th) Trading Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by the Holder, such transaction shall be deemed to have been abandoned and the Holder shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

viii. Notwithstanding the foregoing, this Section 5(c) shall not apply in respect of an Exempt Issuance.

d) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 5(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on exercise hereof) 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.

e) Pro Rata Distributions. During such time as this Note is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Note, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Note (without regard to any limitations on exercise hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

f) Fundamental Transaction. If, at any time while this Note is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of this Note, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Note is convertible immediately prior to such Fundamental Transaction. For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Note following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Note and the other Transaction Documents (as defined in the Securities Purchase Agreement) in accordance with the provisions of this Section 5(f) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Note, deliver to the Holder in exchange for this Note a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Note which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Note (without regard to any limitations on the conversion of this Note) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Note immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

g) Calculations. All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 5, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Company) issued and outstanding.

h) Notice to the Holder.

i . Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 5, the Company shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

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

Section 6. Events of Default.

a) “Event of Default” means, wherever used herein, any of the following events (whatever the reason for such event and whether such event shall be voluntary or involuntary or effected by operation of law or pursuant to any judgment, decree or order of any court, or any order, rule or regulation of any administrative or governmental body):

i. any default in the payment of (A) the principal amount of any Note or (B) interest, liquidated damages and other amounts owing to a Holder on any Note, as and when the same shall become due and payable (whether on a Conversion Date or the Maturity Date or by acceleration or otherwise) which default, solely in the case of an interest payment or other default under clause (B) above, is not cured within 3 Trading Days;

ii. the Company shall fail to observe or perform any other covenant or agreement contained in the Note (other than a breach by the Company of its obligations to deliver shares of Common Stock to the Holder upon conversion, which breach is addressed in clause (x) below) which failure is not cured, if possible to cure, within the earlier to occur of (A) 20 Trading Days after notice of such failure sent by the Holder or by any other Holder to the Company and (B) 20 Trading Days after the Company has become or should have become aware of such failure;

iii. a default or event of default (subject to any grace or cure period provided in the applicable agreement, document or instrument) shall occur under (A) any of the Transaction Documents or (B) any other material agreement, lease, document or instrument to which the Company or any Subsidiary is obligated (and not covered by clause (vi) below);

iv. any representation or warranty made in this Note, any other Transaction Documents, any written statement pursuant hereto or thereto or any other report, financial statement or certificate made or delivered to the Holder or any other Holder shall be untrue or incorrect in any material respect as of the date when made or deemed made;

v. the Company or any Significant Subsidiary shall be subject to a Bankruptcy Event;

vi. the Company or any Subsidiary shall default on any of its obligations under any mortgage, credit agreement or other facility, indenture agreement, factoring agreement or other instrument under which there may be issued, or by which there may be secured or evidenced, any indebtedness for borrowed money or money due under any long term leasing or factoring arrangement that (a) involves an obligation greater than \$50,000, whether such indebtedness now exists or shall hereafter be created, and (b) results in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise become due and payable;

vii. the Common Stock shall not be eligible for listing or quotation for trading on a Trading Market and shall not be eligible to resume listing or quotation for trading thereon within 20 Trading Days or the transfer of shares of Common Stock through the Depository Trust Company System is no longer available or “chilled”;

viii. the Company shall be a party to any Change of Control Transaction or Fundamental Transaction or shall agree to sell or dispose of all or in excess of 50% of its assets in one transaction or a series of related transactions (whether or not such sale would constitute a Change of Control Transaction), except, in each case, with respect to a transaction between the Company, on the one hand, and the Holder or an Affiliate of the Holder on the other;

ix. if during the Effectiveness Period (as defined in the Registration Rights Agreement), either (a) the effectiveness of the Registration Statement lapses for any reason or (b) the Holder shall not be permitted to resell Registrable Securities (as defined in the Registration Rights Agreement) under the Registration Statement for a period of more than 20 consecutive Trading Days or 30 non-consecutive Trading Days during any 12 month period; provided, however, that if the Company is negotiating a merger, consolidation, acquisition or sale of all or substantially all of its assets or a similar transaction and, in the written opinion of counsel to the Company, the Registration Statement would be required to be amended to include information concerning such pending transaction(s) or the parties thereto which information is not available or may not be publicly disclosed at the time, the Company shall be permitted an additional 10 consecutive Trading Days during any 12 month period pursuant to this Section 8(a)(ix);

x. the Company shall fail for any reason to deliver certificates via DWAC to a Holder prior to the 10th Trading Day after a Conversion Date pursuant to Section 4(c) or the Company shall provide at any time notice to the Holder, including by way of public announcement, of the Company’s intention to not honor requests for conversions of the Note in accordance with the terms hereof;

xi. the Company fails to file with the Commission any required reports under Section 13 or 15(d) of the Exchange Act such that it is not in compliance with Rule 144(c)(1) (or Rule 144(i)(2), if applicable);

xii. if the Borrower or any Significant Subsidiary shall: (i) apply for or consent to the appointment of a receiver, trustee, custodian or liquidator of it or any of its properties, (ii) admit in writing its inability to pay its debts as they mature, (iii) make a general assignment for the benefit of creditors, (iv) be adjudicated a bankrupt or insolvent or be the subject of an order for relief under Title 11 of the United States Code or any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute of any other jurisdiction or foreign country, or (v) file a voluntary petition in bankruptcy, or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage or any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or (vi) take or permit to be taken any action in furtherance of or for the purpose of effecting any of the foregoing;

xiii. if any order, judgment or decree shall be entered, without the application, approval or consent of the Borrower or any Significant Subsidiary, by any court of competent jurisdiction, approving a petition seeking liquidation or reorganization of the Borrower or any Subsidiary, or appointing a receiver, trustee, custodian or liquidator of the Borrower or any Subsidiary, or of all or any substantial part of its assets, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days;

xiv. the occurrence of any levy upon or seizure or attachment of, or any uninsured loss of or damage to, any property of the Borrower or any Subsidiary having an aggregate fair value or repair cost (as the case may be) in excess of \$500,000, and any such levy, seizure or attachment shall not be set aside, bonded or discharged within sixty (60) days after the date thereof;

xv. the Company shall fail to maintain sufficient reserved shares pursuant to Section 4.11 of the Securities Purchase Agreement; or

xvi. any monetary judgment, writ or similar final process shall be entered or filed against the Company, any subsidiary or any of their respective property or other assets for more than \$50,000, and such judgment, writ or similar final process shall remain unvacated, unbonded or unstayed for a period of 45 calendar days.

b) Remedies Upon Event of Default. If any Event of Default occurs, the Company shall have thirty (30) days to cure such Event of Default. If following the thirty (30) day period the Event of Default remains, then the outstanding principal amount of this Note, plus accrued but unpaid interest, liquidated damages and other amounts owing in respect thereof through the date of acceleration, shall become, at the Holder's election, immediately due and payable in cash at the Mandatory Default Amount. Commencing thirty (30) days after the occurrence of any Event of Default that results in the eventual acceleration of this Note, the interest rate on this Note shall accrue at a default rate of interest rate equal to 1.5% per month (18% per annum). Upon the payment in full of the Mandatory Default Amount, the Holder shall promptly surrender this Note to or as directed by the Company. In connection with such acceleration described herein, the Holder need not provide, and the Company hereby waives, any presentment, demand, protest or other notice of any kind, and the Holder may immediately and without expiration of any grace period enforce any and all of its rights and remedies hereunder and all other remedies available to it under applicable law. Such acceleration may be rescinded and annulled by Holder at any time prior to payment hereunder and the Holder shall have all rights as a holder of the Note until such time, if any, as the Holder receives full payment pursuant to this Section 6(b). No such rescission or annulment shall affect any subsequent Event of Default or impair any right consequent thereon.

Section 7. Mandatory Redemption or Conversion.

If a public offering is consummated while this Note is outstanding (the "Public Offering") that results in the Company obtaining financing of seven million dollars (\$7,000,000) or greater, the Holder, at its sole option may: (a) redeem, in cash, the balance of principal and accrued interest, multiplied by 115%, to be paid from the proceeds of the Public Offering; or (b) convert the balance of principal and accrued interest, multiplied by 115%, into Common Stock at the Conversion Price. In such event, the Holder shall execute a lock-up agreement, in a form reasonably satisfactory to Holder, to not sell the Common Stock commencing at the time of the roadshow for the Public Offering and ending three (3) months after the Public Offering closes.

Section 8. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holder hereunder, including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service, addressed to the Company, at the address set forth above, or such other facsimile number or address as the Company may specify for such purposes by notice to the Holder delivered in accordance with this Section 8(a). Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of the Holder appearing on the books of the Company, or if no such facsimile number or address appears on the books of the Company, at the principal place of business of such Holder, as set forth in the Securities Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Absolute Obligation. Except as expressly provided herein, no provision of this Note shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of, liquidated damages and accrued interest, as applicable, on this Note at the time, place, and rate, and in the coin or currency, herein prescribed. This Note is a direct debt obligation of the Company. This Note ranks pari passu with all other Notes now or hereafter issued under the terms set forth herein.

c) Lost or Mutilated Note. If this Note shall be mutilated, lost, stolen or destroyed, the Company shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated Note, or in lieu of or in substitution for a lost, stolen or destroyed Note, a new Note for the principal amount of this Note so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such Note, and of the ownership hereof, reasonably satisfactory to the Company.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Note 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 conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Note and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Note or the transactions contemplated hereby. If any party shall commence an action or proceeding to enforce any provisions of this Note, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

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

f) Severability. If any provision of this Note is invalid, illegal or unenforceable, the balance of this Note shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law. The Company covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law or other law which would prohibit or forgive the Company from paying all or any portion of the principal of or interest on this Note as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Note, and the Company (to the extent it may lawfully do so) hereby expressly waives all benefits or advantage of any such law, and covenants that it will not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Holder, but will suffer and permit the execution of every such as though no such law has been enacted.

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

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

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

j) Secured Obligation. The obligations of the Company under this Note are secured by all assets of the Company and each Subsidiary pursuant to the Security Agreement, dated as of July 1, 2015 between the Company, the Subsidiaries of the Company and the Secured Parties (as defined therein), as amended from time-to-time.

(Signature Pages Follow)

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

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title: Chief Executive Officer
Facsimile No. for delivery of Notices: 781-538-4327

THE UNDERSIGNED HOLDER ACKNOWLEDGES AND AGREES THAT THIS NOTE IS SUBJECT TO THE SECURITIES PURCHASE AGREEMENT, AS MORE FULLY SET FORTH HEREIN.

OJSC PHARMSYTHEZ

By: _____
Name:
Title:
Date: _____

ANNEX A

NOTICE OF CONVERSION

The undersigned hereby elects to convert principal under the Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due on the Outside Date of Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), into shares of common stock (the "Common Stock"), of the Company according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as reasonably requested by the Company in accordance therewith. No fee will be charged to the holder for any conversion, except for such transfer taxes, if any.

By the delivery of this Notice of Conversion the undersigned represents and warrants to the Company that its ownership of the Common Stock does not exceed the amounts specified under Section 4 of this Note, as determined in accordance with Section 13(d) of the Exchange Act.

The undersigned agrees to comply with the prospectus delivery requirements under the applicable securities laws in connection with any transfer of the aforesaid shares of Common Stock.

Conversion calculations:

Date to Effect Conversion:

Principal Amount of Note to be Converted:

Payment of Interest in Common Stock yes no

If yes, \$ _____ of Interest Accrued on
Account of Conversion at Issue.

Number of shares of Common Stock to be issued:

Signature:

Name:

DWAC Instructions:

Broker No: _____

Account No: _____

Schedule 1

CONVERSION SCHEDULE

This Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due on the Outside Date in the original principal amount of \$3,000,000 issued by Xenetic Biosciences, Inc., a Nevada corporation. This Conversion Schedule reflects conversions made under Section 4 of the above referenced Note.

Dated:

Date of Conversion (or for first entry, Original Issue Date)	Amount of Conversion	Aggregate Principal Amount Remaining Subsequent to Conversion (or original Principal Amount)	Company Attest

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE 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 SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

**FORM OF
COMMON STOCK PURCHASE WARRANT**

XENETIC BIOSCIENCES, INC.

ISSUE DATE: [_____], 2015

Warrant Shares: [_____]

Initial Exercise Date: Earlier to occur of Measurement Date of March 31, 2016

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, OJSC Pharmsynthez or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the earlier to occur of March 31, 2016 or the Measurement Date (as that term is defined in that certain Asset Purchase Agreement, dated as of November 13, 2015, as amended, among AS Kevelt, Holder, the Company and Lipoxen Technologies, Ltd.)(the "Initial Exercise Date") and on or prior to the close of business on the five (5) year anniversary of the Issue Date written above (the "Termination Date") but not thereafter, to subscribe for and purchase from Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), up to _____ shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms shall have the meanings set forth herein. capitalized terms not otherwise defined herein shall have the meanings set forth in the Securities Purchase Agreement, dated as of June 9, 2015 among the Company and the original Holder, as amended, modified or supplemented from time to time in accordance with its terms (the "Securities Purchase Agreement").

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto and within three (3) Trading Days of the date said Notice of Exercise is delivered to the Company, the Company shall have received payment of the aggregate Exercise Price of the shares thereby purchased by wire transfer or cashier's check drawn on a United States bank. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection of a technical nature to any Notice of Exercise Form to the Holder in writing within one (1) Business Day of receipt of such Notice of Exercise Form and the Holder shall promptly re-deliver a revised Notice of Exercise Form to the Company; provided that any such objection shall not invalidate such Notice of Exercise Form when properly completed by the Holder. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be the lesser of: (i) \$0.20 and (ii) 120% of the Public Offering Price, subject to adjustment hereunder (the "Exercise Price").

c) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. Warrant Shares purchased hereunder shall be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise by the date that is three (3) Trading Days after the latest of (A) the delivery to the Company of the Notice of Exercise and (B) surrender of this Warrant (if required) (such date, the "Warrant Share Delivery Date"). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price and all taxes required to be paid by the Holder, if any, pursuant to Section 2(c)(vi) prior to the issuance of such shares, having been paid. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(c)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, 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 (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. 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. 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 shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

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

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

d) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing $[(A-B) (X)]$ by (A), where:

(A) = the VWAP on the Trading Day immediately preceding the date on which Holder elects to exercise this Warrant by means of a “cashless exercise,” as set forth in the applicable Notice of Exercise;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

(e) Cash Settlement. If on any day the Holder delivers a Notice of Exercise and the number of authorized and unissued shares of Common Stock on such date does not at least equal the number of shares of Common Stock to be delivered to the Holder pursuant to such Notice of Exercise, the Company shall, within three (3) Trading Days of the date of such Notice of Exercise, deliver to the Holder an amount in cash equal to the number of shares of Common Stock so unavailable multiplied by the difference between the Exercise Price on such date and the closing price of the Common Stock on the Trading Market on such date.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant); (ii) subdivides outstanding shares of Common Stock into a larger number of shares; (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares; or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) 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.

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. 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. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction. "Black Scholes Value" means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, L.P. ("Bloomberg") determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Increase of Warrant Shares. In the event that a Public Offering is consummated while the Note is outstanding that results in the Company obtaining financing of seven million dollars (\$7,000,000) or greater, and such Public Offering provides greater warrant coverage than provided in the Securities Purchase Agreement, then the Purchaser shall be granted additional Warrants such that the Purchaser is covered, relative to the Subscription Amount, on a percentage basis that equals the warrant coverage provided in the Public Offering relative to the gross offering price.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3 or there is a New Issuance, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

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

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. 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.

d) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(c)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

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

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law; Jurisdiction. 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 the transactions contemplated by this Warrant (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of this Warrant), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this 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 other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date. If the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

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

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. 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.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

(Signature Page Follows)

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

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title: Chief Executive Officer

Address: Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Mass. 02421
Facsimile: 781-538-4327
E-mail: s.maguire@xeneticbio.com

NOTICE OF EXERCISE

TO: XENETIC BIOSCIENCES, INC.

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number:

(3) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Dated: _____, _____

Holder's Signature: _____

Holder's Address: _____

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE 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 SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

**FORM OF
COMMON STOCK PURCHASE WARRANT**

XENETIC BIOSCIENCES, INC.

ISSUE DATE: [_____] , 2015

Warrant Shares: 1,000,000

Initial Exercise Date: March 31, 2016

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, [_____] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after March 31, 2016 (the "Initial Exercise Date") and on or prior to the close of business on the five (5) year anniversary of the Issue Date written above (the "Termination Date") but not thereafter, to subscribe for and purchase from Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), up to 1,000,000 shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms shall have the meanings set forth herein. capitalized terms not otherwise defined herein shall have the meanings set forth in the Securities Purchase Agreement, dated as of June 9, 2015, as amended among the Company and OJSC Pharmsynthez, as amended, modified or supplemented from time to time in accordance with its terms (the "Purchase Agreement").

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto and within three (3) Trading Days of the date said Notice of Exercise is delivered to the Company, the Company shall have received payment of the aggregate Exercise Price of the shares thereby purchased by wire transfer or cashier's check drawn on a United States bank. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection of a technical nature to any Notice of Exercise Form to the Holder in writing within one (1) Business Day of receipt of such Notice of Exercise Form and the Holder shall promptly re-deliver a revised Notice of Exercise Form to the Company; provided that any such objection shall not invalidate such Notice of Exercise Form when properly completed by the Holder. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$0.42, subject to adjustment hereunder (the "Exercise Price").

c) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. Warrant Shares purchased hereunder shall be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise by the date that is three (3) Trading Days after the latest of (A) the delivery to the Company of the Notice of Exercise and (B) surrender of this Warrant (if required) (such date, the "Warrant Share Delivery Date"). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price and all taxes required to be paid by the Holder, if any, pursuant to Section 2(c)(vi) prior to the issuance of such shares, having been paid. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(c)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, 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 (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. 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. 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 shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

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

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

(d) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing $[(A-B) (X)]$ by (A), where:

(A) = the VWAP on the Trading Day immediately preceding the date on which Holder elects to exercise this Warrant by means of a “cashless exercise,” as set forth in the applicable Notice of Exercise;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

(e) Cash Settlement. If on any day the Holder delivers a Notice of Exercise and the number of authorized and unissued shares of Common Stock on such date does not at least equal the number of shares of Common Stock to be delivered to the Holder pursuant to such Notice of Exercise, the Company shall, within three (3) Trading Days of the date of such Notice of Exercise, deliver to the Holder an amount in cash equal to the number of shares of Common Stock so unavailable multiplied by the difference between the Exercise Price on such date and the closing price of the Common Stock on the Trading Market on such date.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant); (ii) subdivides outstanding shares of Common Stock into a larger number of shares; (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares; or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) 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.

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. 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. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction. “Black Scholes Value” means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. (“Bloomberg”) determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Increase of Warrant Shares. [Reserved]

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3 or there is a New Issuance, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

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

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. 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.

d) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(c)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

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

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law; Jurisdiction. 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 the transactions contemplated by this Warrant (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of this Warrant), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this 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 other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date. If the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

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

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. 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.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

(Signature Page Follows)

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

XENETIC BIOSCIENCES, INC.

By: _____

Name:

Title:

Address:

NOTICE OF EXERCISE

TO: XENETIC BIOSCIENCES, INC.

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number:

(3) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Dated: _____, _____

Holder's Signature: _____

Holder's Address: _____

NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS CONVERTIBLE 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 SECURITY AND THE SECURITIES ISSUABLE UPON CONVERSION OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

Original Issue Date: **July 1, 2015 (amended and restated as of [_____] , 2015)**
Original Conversion Price (subject to adjustment herein): **\$0.15**

Principal Amount: \$3,000,000

**FORM OF
AMENDED AND RESTATED
TEN PERCENT (10%) SENIOR SECURED COLLATERALIZED
CONVERTIBLE PROMISSORY NOTE
DUE October 1, 2016**

THIS AMENDED AND RESTATED TEN PERCENT (10%) SENIOR SECURED COLLATERALIZED CONVERTIBLE PROMISSORY NOTE is a duly authorized and validly issued Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note of Xenetic Biosciences, Inc., a Nevada corporation (the "Company" or the "Borrower"), having its principal place of business at 99 Hayden Ave, Suite 230, Lexington, Massachusetts 02421, designated as its Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due October 1, 2016 (the "Note"). THIS NOTE AMENDS, RESTATES, SUPERSEDES AND REPLACES IN ITS ENTIRETY THAT CERTAIN TEN PERCENT (10%) SENIOR SECURED COLLATERALIZED CONVERTIBLE PROMISSORY NOTE OF THE COMPANY DATED JULY 1, 2015 (the "Original Note").

FOR VALUE RECEIVED, the Company promises to pay to OJSC Pharmsynthez or its registered assigns (the "Holder"), or shall have paid pursuant to the terms hereunder, the principal sum of \$3,000,000 on October 1, 2016 (the "Maturity Date") or such earlier date as this Note is required or permitted to be repaid as provided hereunder, and to pay interest to the Holder on the aggregate unconverted and then outstanding principal amount of this Note in accordance with the provisions hereof. This Note is subject to the following additional provisions:

Section 1. Definitions. For the purposes hereof, in addition to the terms defined elsewhere in this Note, (a) capitalized terms not otherwise defined herein shall have the meanings set forth in the Purchase Agreement and (b) the following terms shall have the following meanings:

“Alternate Consideration” shall have the meaning set forth in Section 5(f).

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

“Base Conversion Price” shall have the meaning set forth in Section 5(b).

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

“Buy-In” shall have the meaning set forth in Section 4(c)(v).

“Change of Control Transaction” means the occurrence after the date hereof of any of (a) an acquisition by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Company, by contract or otherwise) of in excess of 50% of the voting securities of the Company (other than by means of conversion or exercise of the Note and the Securities issued together with the Note), (b) the Company merges into or consolidates with any other Person, or any Person merges into or consolidates with the Company and, after giving effect to such transaction, the stockholders of the Company immediately prior to such transaction own less than 50% of the aggregate voting power of the Company or the successor entity of such transaction, (c) the Company sells or transfers all or substantially all of its assets to another Person and the stockholders of the Company immediately prior to such transaction own less than 50% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a three year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the date hereof), or (e) the execution by the Company of an agreement to which the Company is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Conversion” shall have the meaning ascribed to such term in Section 4.

“Conversion Date” shall have the meaning set forth in Section 4(a).

“Conversion Price” shall have the meaning set forth in Section 4(b).

“Conversion Schedule” means the Conversion Schedule in the form of Schedule 1 attached hereto.

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

“Dilutive Issuance” shall have the meaning set forth in Section 5(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 5(b).

“DTC” means the Depository Trust Company.

“DTC/FAST Program” means the DTC’s Fast Automated Securities Transfer Program.

“DWAC” means Deposit Withdrawal at Custodian as defined by the DTC.

“DWAC Eligible” means that (a) the Common Stock is eligible at DTC for full services pursuant to DTC’s Operational Arrangements, including without limitation transfer through DTC’s DWAC system, (b) the Company has been approved (without revocation) by the DTC’s underwriting department, (c) the Transfer Agent is approved as an agent in the DTC/FAST Program, (d) the Conversion Shares are otherwise eligible for delivery via DWAC, and (e) the Transfer Agent does not have a policy prohibiting or limiting delivery of the Conversion Shares via DWAC.

“Effectiveness Period” shall have the meaning set forth in the Registration Rights Agreement.

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

“Fundamental Transaction” shall have the meaning set forth in Section 5(f).

“Late Fees” shall have the meaning set forth in Section 2(d).

“Make-Whole Amount” means, with respect to the applicable date of determination, an amount in cash equal to all of the interest that, but for the applicable conversion or default payment, would have accrued pursuant to Section 2 with respect to the applicable principal amount being so converted or redeemed for the period commencing on the applicable redemption date or Conversion Date or default payment date and ending on the Maturity Date.

“Mandatory Default Amount” means the payment of all outstanding principal and accrued interest, with accrued interest defined as set forth in Section 2(c).

“New York Courts” shall have the meaning set forth in Section 8(d).

“Note Register” shall have the meaning set forth in Section 2(c).

“Notice of Conversion” shall have the meaning set forth in Section 4(a).

“Original Issue Date” means the date of the first issuance of the Note, regardless of any transfers of any Note and regardless of the number of instruments which may be issued to evidence such Note.

“Permitted Indebtedness” means the indebtedness evidenced by the Note.

“Permitted Lien” means the individual and collective reference to the following: (a) Liens for taxes, assessments and other governmental charges or levies not yet due or Liens for taxes, assessments and other governmental charges or levies being contested in good faith and by appropriate proceedings for which adequate reserves (in the good faith judgment of the management of the Company) have been established in accordance with GAAP, (b) Liens imposed by law which were incurred in the ordinary course of the Company’s business, such as carriers’, warehousemen’s and mechanics’ Liens, statutory landlords’ Liens, and other similar Liens arising in the ordinary course of the Company’s business, and which (x) do not individually or in the aggregate materially detract from the value of such property or assets or materially impair the use thereof in the operation of the business of the Company and its consolidated Subsidiaries or (y) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing for the foreseeable future the forfeiture or sale of the property or asset subject to such Lien and (c) Liens incurred in connection with Permitted Indebtedness.

“Purchase Agreement” means the Securities Purchase Agreement, dated as of June 9, 2015 among the Company and the original Holder, as amended, modified or supplemented from time to time in accordance with its terms.

“Registration Rights Agreement” means the Registration Rights Agreement, dated as of the date of the Purchase Agreement, among the Company and the original Holder, in the form of Exhibit B attached to the Purchase Agreement.

“Registration Statement” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale of the Underlying Shares by each Holder as provided for in the Registration Rights Agreement.

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

“Share Delivery Date” shall have the meaning set forth in Section 4(c)(ii).

“Successor Entity” shall have the meaning set forth in Section 5(f).

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

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

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTC Bulletin Board is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by Pink OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

Section 2. Interest.

a) Payment of Interest in Cash or Kind. The Company shall pay interest to the Holder on the aggregate unconverted and then outstanding principal amount of this Note at the rate of 10% per annum, payable quarterly (as to that principal amount then being converted) and on the Maturity Date in cash or, at the Company's option, in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock or a combination thereof at the lesser of \$0.15 or the then applicable conversion price.

b) Interest Calculations. Interest shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar day periods, and shall accrue daily commencing on the Original Issue Date until payment in full of the outstanding principal, together with all accrued and unpaid interest, liquidated damages and other amounts which may become due hereunder, has been made. Payment of interest in shares of Common Stock shall otherwise occur pursuant to Section 4(c)(ii) herein. Interest hereunder will be paid to the Person in whose name this Note is registered on the records of the Company regarding registration and transfers of this Note (the "Note Register"). Except as otherwise provided herein, if at any time the Company pays interest partially in cash and partially in shares of Common Stock to the holder of the Note, then such payment of cash shall be distributed ratably among the holders of the then-outstanding Note based on their (or their predecessor's) initial purchases of Note pursuant to the Purchase Agreement.

c) Late Fee. All overdue accrued and unpaid interest to be paid hereunder shall entail a late fee at an interest rate equal to the lesser of 18% per annum or the maximum rate permitted by applicable law (the "Late Fees") which shall accrue daily from the date such interest is due hereunder through and including the date of actual payment in full.

d) Reserved.

e) Prepayment. Subject to Section 7 herein, prior to the one (1) year anniversary of the Original Issue Date, but not before the six (6) month anniversary of the Original Issue Date, upon ten (10) days written notice to the Holder, the Company may prepay any portion of the principal amount of this Note and any accrued and unpaid interest. If the Borrower exercises its right to prepay the Note, the Borrower shall make payment to the Holder of an amount in cash equal to the sum of the then outstanding principal amount of this Note and interest multiplied by 115%. The Holder may continue to convert the Note from the date notice of the prepayment is given until the date of the prepayment.

Section 3. Registration of Transfers and Exchanges.

a) Different Denominations. This Note is exchangeable for an equal aggregate principal amount of Notes of different authorized denominations, as requested by the Holder surrendering the same. No service charge will be payable for such registration of transfer or exchange.

b) Investment Representations. This Note has been issued subject to certain investment representations of the original Holder set forth in the Purchase Agreement and may be transferred or exchanged only in compliance with the Purchase Agreement and applicable federal and state securities laws and regulations.

c) Reliance on Note Register. Prior to due presentment for transfer to the Company of this Note, the Company and any agent of the Company may treat the Person in whose name this Note is duly registered on the Note Register as the owner hereof for the purpose of receiving payment as herein provided and for all other purposes, whether or not this Note is overdue, and neither the Company nor any such agent shall be affected by notice to the contrary.

Section 4. Conversion.

a) Voluntary Conversion. This Note shall be convertible, in whole or in part, into shares of Common Stock at the option of the Holder, at any time and from time to time. The Holder shall effect conversions by delivering to the Company a Notice of Conversion, the form of which is attached hereto as Annex A (each, a "Notice of Conversion"), specifying therein the principal amount of this Note to be converted and accrued interest as of the date on which such conversion shall be effected (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. To effect conversions hereunder, the Holder shall not be required to physically surrender this Note to the Company unless the entire principal amount of this Note, plus all accrued and unpaid interest thereon, has been so converted. Conversions hereunder shall have the effect of lowering the outstanding principal amount of this Note in an amount equal to the applicable conversion. The Holder and the Company shall maintain records showing the principal amount(s) converted and the date of such conversion(s). The Company may deliver an objection to any Notice of Conversion within one (1) Business Day of delivery of such Notice of Conversion. In the event of any dispute or discrepancy, the records of the Holder shall be controlling and determinative in the absence of manifest error. **The Holder, and any assignee by acceptance of this Note, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Note, the unpaid and unconverted principal amount of this Note may be less than the amount stated on the face hereof.**

b) Conversion Price. The conversion price in effect on any Conversion Date shall be equal to **\$0.15** (the "Conversion Price"). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such measuring period. Nothing herein shall limit a Holder's right to pursue actual damages or declare an Event of Default pursuant to Section 6 hereof and the Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

c) Mechanics of Conversion.

i . Conversion Shares Issuable Upon Conversion of Principal Amount. The number of Conversion Shares issuable upon a conversion hereunder shall be determined by the quotient obtained by dividing (x) the outstanding principal amount of this Note to be converted by (y) the Conversion Price.

i i . Delivery of Certificate Upon Conversion. Not later than three (3) Trading Days after each Conversion Date (the “Share Delivery Date”), the Company shall deliver, or cause to be delivered, to the Holder (A) a certificate or certificates representing the Conversion Shares which, on or after the earlier of (i) the six month anniversary of the Original Issue Date or (ii) the Effective Date, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Purchase Agreement) representing the number of Conversion Shares being acquired upon the conversion of this Note, (B) a bank check in the amount of accrued and unpaid interest (if the Company has elected or is required to pay accrued interest in cash) and (C) a bank check in the amount of the Make-Whole Amount. All certificate or certificates required to be delivered by the Company under this Section 4(c) shall be delivered electronically through the Depository Trust Company or another established clearing corporation performing similar functions. If the Conversion Date is prior to the earlier of (i) the six month anniversary of the Original Issue Date or (ii) the Effective Date, then the Conversion Shares shall bear a restrictive legend in the following form, as appropriate:

“NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

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

iv. Obligation Absolute; Partial Liquidated Damages. The Company's obligations to issue and deliver the Conversion Shares upon conversion of this Note 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 such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Company of any such action the Company may have against the Holder. In the event the Holder of this Note shall elect to convert any or all of the outstanding principal amount hereof, the Company may not refuse conversion based on any claim that the Holder or anyone associated or affiliated with the Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and or enjoining conversion of all or part of this Note shall have been sought and obtained, and the Company posts a surety bond for the benefit of the Holder in the amount of 150% of the outstanding principal amount of this Note, which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to the Holder to the extent it obtains judgment. In the absence of such injunction, the Company shall issue Conversion Shares or, if applicable, cash, upon a properly noticed conversion. If the Company fails for any reason to deliver to the Holder such certificate or certificates pursuant to Section 4(c)(ii) by the Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of principal amount being converted, \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Share Delivery Date until such certificates are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages or declare an Event of Default pursuant to Section 6 hereof for the Company's failure to deliver Conversion Shares within the period specified herein and the Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

v. Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. In addition to any other rights available to the Holder, if the Company fails for any reason to deliver to the Holder such certificate or certificates by the Share Delivery Date pursuant to Section 4(c)(ii), and if after such Share Delivery Date the Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Conversion Shares which the Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Company shall (A) pay in cash to the Holder (in addition to any other remedies available to or elected by the Holder) the amount, if any, by which (x) the Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that the Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of the Holder, either reissue (if surrendered) this Note in a principal amount equal to the principal amount of the attempted conversion (in which case such conversion shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued if the Company had timely complied with its delivery requirements under Section 4(c)(ii). For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of this Note with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Company shall be required to pay the Holder \$1,000. 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. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon conversion of this Note as required pursuant to the terms hereof.

vi. Reservation of Shares Issuable Upon Conversion. The Company covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock a number of shares of Common Stock at least equal to 200% of the Required Minimum (to be adjusted quarterly) for the sole purpose of covering the Underlying Shares (subject to the terms and conditions set forth in the Purchase Agreement). The Company covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable and, if the Registration Statement is then effective under the Securities Act, shall be registered for public resale in accordance with such Registration Statement (subject to such Holder's compliance with its obligations under the Section 4.17 of the Purchase Agreement).

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

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

Section 5. Certain Adjustments.

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

b) Subsequent Equity Sales. If, at any time while this Note is outstanding, the Company or any Subsidiary, as applicable, sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower (after accounting for stock splits and similar adjustments) than the then Conversion Price (such lower price, the “Base Conversion Price” and such issuances, collectively, a “Dilutive Issuance”) (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 5(b) in respect of an Exempt Issuance. If the Company enters into a Variable Rate Transaction, despite the prohibition set forth in the Purchase Agreement, the Company shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible conversion price at which such securities may be converted or exercised. The Company shall notify the Holder in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 5(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the “Dilutive Issuance Notice”). For purposes of clarification, whether or not the Company provides a Dilutive Issuance Notice pursuant to this Section 5(b), upon the occurrence of any Dilutive Issuance, the Holder is entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether the Holder accurately refers to the Base Conversion Price in the Notice of Conversion.

c) Preemptive Rights.

i. From the date hereof until the date that is the 12-month anniversary of the last Closing, upon any issuance by the Company of Common Stock, Common Stock Equivalents or debt for cash consideration, Indebtedness or a combination of units thereof (a “Subsequent Financing”), the Holder shall have the right to participate in an amount equal to up to 100% of the Subsequent Financing (the “Participation Maximum”) on the same terms, conditions and price provided for in the Subsequent Financing.

ii. At least five (5) Trading Days prior to the closing of the Subsequent Financing, the Company shall deliver to the Holder a written notice of its intention to effect a Subsequent Financing (“Pre-Notice”), which Pre-Notice shall ask the Holder if it wants to review the details of such financing (such additional notice, a “Subsequent Financing Notice”). Upon the request of the Holder, and only upon a request by the Holder, for a Subsequent Financing Notice, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver a Subsequent Financing Notice to the Holder. The Subsequent Financing Notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet or similar document relating thereto as an attachment.

iii. If the Holder desires to participate in such Subsequent Financing, the Holder must provide written notice to the Company that the Holder is willing to participate in the Subsequent Financing, the amount of the Holder’s participation, and representing and warranting that the Holder has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice.

iv. If notifications by the Holder of its willingness to participate in the Subsequent Financing (or to cause their designees to participate) is, in the aggregate, less than the total amount of the Subsequent Financing, then the Company may effect the remaining portion of such Subsequent Financing on the terms and with the Persons set forth in the Subsequent Financing Notice.

v. The Company must provide the Holder with a second Subsequent Financing Notice, and the Holder will again have the right of participation set forth above in this Section 5(c), if the Subsequent Financing subject to the initial Subsequent Financing Notice is not consummated for any reason on the terms set forth in such Subsequent Financing Notice within thirty (30) Trading Days after the date of the initial Subsequent Financing Notice.

vi. The Company and the Holder agree that if the Holder elects to participate in the Subsequent Financing, the transaction documents related to the Subsequent Financing shall not include any term or provision whereby the Holder shall be required to agree to any restrictions on trading as to any of the Securities purchased hereunder or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, this Agreement, without the prior written consent of such Holder.

vii. Notwithstanding anything to the contrary in this Section 5(c) and unless otherwise agreed to by the Holder, the Company shall either confirm in writing to the Holder that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that such Holder will not be in possession of any material, non-public information, by the tenth (10th) Trading Day following delivery of the Subsequent Financing Notice. If by such tenth (10th) Trading Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by the Holder, such transaction shall be deemed to have been abandoned and the Holder shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

viii. Notwithstanding the foregoing, this Section 5(c) shall not apply in respect of an Exempt Issuance.

d) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 5(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on exercise hereof) 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.

e) Pro Rata Distributions. During such time as this Note is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Note, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Note (without regard to any limitations on exercise hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

f) Fundamental Transaction. If, at any time while this Note is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of this Note, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Note is convertible immediately prior to such Fundamental Transaction. For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Note following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Note and the other Transaction Documents (as defined in the Purchase Agreement) in accordance with the provisions of this Section 5(f) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Note, deliver to the Holder in exchange for this Note a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Note which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Note (without regard to any limitations on the conversion of this Note) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Note immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

g) Calculations. All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 5, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Company) issued and outstanding.

h) Notice to the Holder.

i . Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 5, the Company shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

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

Section 6. Events of Default.

a) “Event of Default” means, wherever used herein, any of the following events (whatever the reason for such event and whether such event shall be voluntary or involuntary or effected by operation of law or pursuant to any judgment, decree or order of any court, or any order, rule or regulation of any administrative or governmental body):

i. any default in the payment of (A) the principal amount of any Note or (B) interest, liquidated damages and other amounts owing to a Holder on any Note, as and when the same shall become due and payable (whether on a Conversion Date or the Maturity Date or by acceleration or otherwise) which default, solely in the case of an interest payment or other default under clause (B) above, is not cured within 3 Trading Days;

ii. the Company shall fail to observe or perform any other covenant or agreement contained in the Note (other than a breach by the Company of its obligations to deliver shares of Common Stock to the Holder upon conversion, which breach is addressed in clause (x) below) which failure is not cured, if possible to cure, within the earlier to occur of (A) 20 Trading Days after notice of such failure sent by the Holder or by any other Holder to the Company and (B) 20 Trading Days after the Company has become or should have become aware of such failure;

iii. a default or event of default (subject to any grace or cure period provided in the applicable agreement, document or instrument) shall occur under (A) any of the Transaction Documents or (B) any other material agreement, lease, document or instrument to which the Company or any Subsidiary is obligated (and not covered by clause (vi) below);

iv. any representation or warranty made in this Note, any other Transaction Documents, any written statement pursuant hereto or thereto or any other report, financial statement or certificate made or delivered to the Holder or any other Holder shall be untrue or incorrect in any material respect as of the date when made or deemed made;

v. the Company or any Significant Subsidiary shall be subject to a Bankruptcy Event;

vi. the Company or any Subsidiary shall default on any of its obligations under any mortgage, credit agreement or other facility, indenture agreement, factoring agreement or other instrument under which there may be issued, or by which there may be secured or evidenced, any indebtedness for borrowed money or money due under any long term leasing or factoring arrangement that (a) involves an obligation greater than \$50,000, whether such indebtedness now exists or shall hereafter be created, and (b) results in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise become due and payable;

vii. the Common Stock shall not be eligible for listing or quotation for trading on a Trading Market and shall not be eligible to resume listing or quotation for trading thereon within 20 Trading Days or the transfer of shares of Common Stock through the Depository Trust Company System is no longer available or “chilled”;

viii. the Company shall be a party to any Change of Control Transaction or Fundamental Transaction or shall agree to sell or dispose of all or in excess of 50% of its assets in one transaction or a series of related transactions (whether or not such sale would constitute a Change of Control Transaction), except, in each case, with respect to a transaction between the Company, on the one hand, and the Holder or an Affiliate of the Holder on the other;

ix. if during the Effectiveness Period (as defined in the Registration Rights Agreement), either (a) the effectiveness of the Registration Statement lapses for any reason or (b) the Holder shall not be permitted to resell Registrable Securities (as defined in the Registration Rights Agreement) under the Registration Statement for a period of more than 20 consecutive Trading Days or 30 non-consecutive Trading Days during any 12 month period; provided, however, that if the Company is negotiating a merger, consolidation, acquisition or sale of all or substantially all of its assets or a similar transaction and, in the written opinion of counsel to the Company, the Registration Statement would be required to be amended to include information concerning such pending transaction(s) or the parties thereto which information is not available or may not be publicly disclosed at the time, the Company shall be permitted an additional 10 consecutive Trading Days during any 12 month period pursuant to this Section 8(a)(ix);

x. the Company shall fail for any reason to deliver certificates via DWAC to a Holder prior to the 10th Trading Day after a Conversion Date pursuant to Section 4(c) or the Company shall provide at any time notice to the Holder, including by way of public announcement, of the Company’s intention to not honor requests for conversions of the Note in accordance with the terms hereof;

xi. the Company fails to file with the Commission any required reports under Section 13 or 15(d) of the Exchange Act such that it is not in compliance with Rule 144(c)(1) (or Rule 144(i)(2), if applicable);

xii. if the Borrower or any Significant Subsidiary shall: (i) apply for or consent to the appointment of a receiver, trustee, custodian or liquidator of it or any of its properties, (ii) admit in writing its inability to pay its debts as they mature, (iii) make a general assignment for the benefit of creditors, (iv) be adjudicated a bankrupt or insolvent or be the subject of an order for relief under Title 11 of the United States Code or any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute of any other jurisdiction or foreign country, or (v) file a voluntary petition in bankruptcy, or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage or any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or (vi) take or permit to be taken any action in furtherance of or for the purpose of effecting any of the foregoing;

xiii. if any order, judgment or decree shall be entered, without the application, approval or consent of the Borrower or any Significant Subsidiary, by any court of competent jurisdiction, approving a petition seeking liquidation or reorganization of the Borrower or any Subsidiary, or appointing a receiver, trustee, custodian or liquidator of the Borrower or any Subsidiary, or of all or any substantial part of its assets, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days;

xiv. the occurrence of any levy upon or seizure or attachment of, or any uninsured loss of or damage to, any property of the Borrower or any Subsidiary having an aggregate fair value or repair cost (as the case may be) in excess of \$500,000, and any such levy, seizure or attachment shall not be set aside, bonded or discharged within sixty (60) days after the date thereof;

xv. the Company shall fail to maintain sufficient reserved shares pursuant to Section 4.11 of the Purchase Agreement; or

xvi. any monetary judgment, writ or similar final process shall be entered or filed against the Company, any subsidiary or any of their respective property or other assets for more than \$50,000, and such judgment, writ or similar final process shall remain unvacated, unbonded or unstayed for a period of 45 calendar days.

b) Remedies Upon Event of Default. If any Event of Default occurs, the Company shall have thirty (30) days to cure such Event of Default. If following the thirty (30) day period the Event of Default remains, then the outstanding principal amount of this Note, plus accrued but unpaid interest, liquidated damages and other amounts owing in respect thereof through the date of acceleration, shall become, at the Holder's election, immediately due and payable in cash at the Mandatory Default Amount. Commencing thirty (30) days after the occurrence of any Event of Default that results in the eventual acceleration of this Note, the interest rate on this Note shall accrue at a default rate of interest rate equal to 1.5% per month (18% per annum). Upon the payment in full of the Mandatory Default Amount, the Holder shall promptly surrender this Note to or as directed by the Company. In connection with such acceleration described herein, the Holder need not provide, and the Company hereby waives, any presentment, demand, protest or other notice of any kind, and the Holder may immediately and without expiration of any grace period enforce any and all of its rights and remedies hereunder and all other remedies available to it under applicable law. Such acceleration may be rescinded and annulled by Holder at any time prior to payment hereunder and the Holder shall have all rights as a holder of the Note until such time, if any, as the Holder receives full payment pursuant to this Section 6(b). No such rescission or annulment shall affect any subsequent Event of Default or impair any right consequent thereon.

Section 7. Mandatory Redemption or Conversion.

If a public offering is consummated while this Note is outstanding (the "Public Offering") that results in the Company obtaining financing of seven million dollars (\$7,000,000) or greater, the Holder, at its sole option may: (a) redeem, in cash, the balance of principal and accrued interest, multiplied by 115%, to be paid from the proceeds of the Public Offering; or (b) convert the balance of principal and accrued interest, multiplied by 115%, into Common Stock at the Conversion Price. In such event, the Holder shall execute a lock-up agreement, in a form reasonably satisfactory to Holder, to not sell the Common Stock commencing at the time of the roadshow for the Public Offering and ending three (3) months after the Public Offering closes.

Section 8. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holder hereunder, including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service, addressed to the Company, at the address set forth above, or such other facsimile number or address as the Company may specify for such purposes by notice to the Holder delivered in accordance with this Section 8(a). Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of the Holder appearing on the books of the Company, or if no such facsimile number or address appears on the books of the Company, at the principal place of business of such Holder, as set forth in the Purchase Agreement. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Absolute Obligation. Except as expressly provided herein, no provision of this Note shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of, liquidated damages and accrued interest, as applicable, on this Note at the time, place, and rate, and in the coin or currency, herein prescribed. This Note is a direct debt obligation of the Company. This Note ranks pari passu with all other Notes now or hereafter issued under the terms set forth herein.

c) Lost or Mutilated Note. If this Note shall be mutilated, lost, stolen or destroyed, the Company shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated Note, or in lieu of or in substitution for a lost, stolen or destroyed Note, a new Note for the principal amount of this Note so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such Note, and of the ownership hereof, reasonably satisfactory to the Company.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Note 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 conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Note and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Note or the transactions contemplated hereby. If any party shall commence an action or proceeding to enforce any provisions of this Note, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

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

f) Severability. If any provision of this Note is invalid, illegal or unenforceable, the balance of this Note shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law. The Company covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law or other law which would prohibit or forgive the Company from paying all or any portion of the principal of or interest on this Note as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Note, and the Company (to the extent it may lawfully do so) hereby expressly waives all benefits or advantage of any such law, and covenants that it will not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Holder, but will suffer and permit the execution of every such as though no such law has been enacted.

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

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

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

j) Secured Obligation. The obligations of the Company under this Note are secured by all assets of the Company and each Subsidiary pursuant to the Security Agreement, dated as of July 1, 2015 between the Company, the Subsidiaries of the Company and the Secured Parties (as defined therein).

(Signature Pages Follow)

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

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title: Chief Executive Officer
Facsimile No. for delivery of Notices: 781-538-4327

THE UNDERSIGNED HOLDER ACKNOWLEDGES AND AGREES THAT THIS NOTE AMENDS, RESTATES, SUPERSEDES AND REPLACES IN ITS ENTIRETY THE ORIGINAL NOTE:

OJSC PHARMSYTHEZ

By: _____
Name:
Title:
Date: _____

ANNEX A

NOTICE OF CONVERSION

The undersigned hereby elects to convert principal under the Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due October 1, 2016 of Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), into shares of common stock (the "Common Stock"), of the Company according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as reasonably requested by the Company in accordance therewith. No fee will be charged to the holder for any conversion, except for such transfer taxes, if any.

By the delivery of this Notice of Conversion the undersigned represents and warrants to the Company that its ownership of the Common Stock does not exceed the amounts specified under Section 4 of this Note, as determined in accordance with Section 13(d) of the Exchange Act.

The undersigned agrees to comply with the prospectus delivery requirements under the applicable securities laws in connection with any transfer of the aforesaid shares of Common Stock.

Conversion calculations:

Date to Effect Conversion:

Principal Amount of Note to be Converted:

Payment of Interest in Common Stock yes no

If yes, \$ _____ of Interest Accrued on
Account of Conversion at Issue.

Number of shares of Common Stock to be issued:

Signature:

Name:

DWAC Instructions:

Broker No: _____

Account No: _____

Schedule 1

CONVERSION SCHEDULE

This Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note due on October 1, 2016 in the original principal amount of \$3,000,000 issued by Xenetic Biosciences, Inc., a Nevada corporation. This Conversion Schedule reflects conversions made under Section 4 of the above referenced Note.

Dated:

Date of Conversion (or for first entry, Original Issue Date)	Amount of Conversion	Aggregate Principal Amount Remaining Subsequent to Conversion (or original Principal Amount)	Company Attest

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE 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 SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

**FORM OF
COMMON STOCK PURCHASE WARRANT**

XENETIC BIOSCIENCES, INC.

ISSUE DATE: JULY 1, 2015 (AMENDED AND RESTATED AS OF [_____])

Warrant Shares: 10,000,000

Initial Exercise Date: Earlier to occur of Measurement Date or March 31, 2016

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, OJSC Pharmsynthez or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the earlier to occur of March 31, 2016 and the Measurement Date (as that term is defined in that certain Asset Purchase Agreement, dated as of November [], 2015, as amended, among AS Kevelt, Holder, the Company and Lipoxen Technologies, Ltd.)(the "Initial Exercise Date") and on or prior to the close of business on the five (5) year anniversary of the Issue Date written above (the "Termination Date") but not thereafter, to subscribe for and purchase from Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), up to 10,000,000 shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). THIS WARRANT AMENDS, RESTATES, SUPERSEDES AND REPLACES IN ITS ENTIRETY THAT CERTAIN COMMON STOCK PURCHASE WARRANT OF THE COMPANY ISSUED TO THE HOLDER DATED JULY 1, 2015 (the "Original Warrant").

Section 1. Definitions. Capitalized terms shall have the meanings set forth herein. capitalized terms not otherwise defined herein shall have the meanings set forth in the Securities Purchase Agreement, dated as of June 9, 2015 among the Company and the original Holder, as amended, modified or supplemented from time to time in accordance with its terms (the "Purchase Agreement").

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy of the Notice of Exercise form annexed hereto and within three (3) Trading Days of the date said Notice of Exercise is delivered to the Company, the Company shall have received payment of the aggregate Exercise Price of the shares thereby purchased by wire transfer or cashier's check drawn on a United States bank. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection of a technical nature to any Notice of Exercise Form to the Holder in writing within one (1) Business Day of receipt of such Notice of Exercise Form and the Holder shall promptly re-deliver a revised Notice of Exercise Form to the Company; provided that any such objection shall not invalidate such Notice of Exercise Form when properly completed by the Holder. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be the lesser of: (i) \$0.20 and (ii) 120% of the Public Offering Price, subject to adjustment hereunder (the "Exercise Price").

c) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. Warrant Shares purchased hereunder shall be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise by the date that is three (3) Trading Days after the latest of (A) the delivery to the Company of the Notice of Exercise and (B) surrender of this Warrant (if required) (such date, the "Warrant Share Delivery Date"). The Warrant Shares shall be deemed to have been issued, and Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price and all taxes required to be paid by the Holder, if any, pursuant to Section 2(c)(vi) prior to the issuance of such shares, having been paid. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(c)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, 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 (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. 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. 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 shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

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

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

(d) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing $[(A-B) (X)]$ by (A), where:

(A) = the VWAP on the Trading Day immediately preceding the date on which Holder elects to exercise this Warrant by means of a “cashless exercise,” as set forth in the applicable Notice of Exercise;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

(e) Cash Settlement. If on any day the Holder delivers a Notice of Exercise and the number of authorized and unissued shares of Common Stock on such date does not at least equal the number of shares of Common Stock to be delivered to the Holder pursuant to such Notice of Exercise, the Company shall, within three (3) Trading Days of the date of such Notice of Exercise, deliver to the Holder an amount in cash equal to the number of shares of Common Stock so unavailable multiplied by the difference between the Exercise Price on such date and the closing price of the Common Stock on the Trading Market on such date.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant); (ii) subdivides outstanding shares of Common Stock into a larger number of shares; (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares; or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) 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.

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. 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. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction. “Black Scholes Value” means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. (“Bloomberg”) determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Increase of Warrant Shares. In the event that a Public Offering is consummated while the Note is outstanding that results in the Company obtaining financing of seven million dollars (\$7,000,000) or greater, and such Public Offering provides greater warrant coverage than provided in the Purchase Agreement, then the Purchaser shall be granted additional Warrants such that the Purchaser is covered, relative to the Subscription Amount, on a percentage basis that equals the warrant coverage provided in the Public Offering relative to the gross offering price.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3 or there is a New Issuance, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

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

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. 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.

d) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(c)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

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

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law; Jurisdiction. 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 the transactions contemplated by this Warrant (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of this Warrant), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this 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 other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date. If the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

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

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. 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.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

(Signature Page Follows)

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

XENETIC BIOSCIENCES, INC.

By: _____

Name: M. Scott Maguire

Title: Chief Executive Officer

Address:

99 Hayden Avenue, Suite 230

Lexington, Mass. 02421

Facsimile: 781-538-4327

E-mail: s.maguire@xeneticbio.com

Attention: M. Scott Maguire, CEO

THE UNDERSIGNED HOLDER ACKNOWLEDGES AND AGREES THAT THIS WARRANT AMENDS, RESTATES, SUPERSEDES AND REPLACES IN ITS ENTIRETY THE ORIGINAL WARRANT:

OJSC PHARMSYTHEZ

By: _____

Name:

Title:

Date: _____

NOTICE OF EXERCISE

TO: XENETIC BIOSCIENCES, INC.

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number:

(3) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Dated: _____, _____

Holder's Signature: _____

Holder's Address: _____

**FORM OF
FIRST AMENDMENT TO SECURITIES PURCHASE AGREEMENT**

This First Amendment to Securities Purchase Agreement (this "Amendment") is dated as of November [], 2015 between Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), and the purchaser identified on the signature pages hereto (the "Purchaser").

WHEREAS, the Company and the Purchaser are parties to that certain Securities Purchase Agreement, dated as of June 9, 2015 (as the same is being amended by this Amendment, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Securities Purchase Agreement"; capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Securities Purchase Agreement), pursuant to which the Purchaser purchased from the Company a \$3 million Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note and the Company issued to the Purchaser a Common Stock Purchase Warrant to purchase up to 10 million shares of common stock of the Company, par value \$0.01 per share.

WHEREAS, the Company, the Purchaser and AS Kevelt, a subsidiary of the Purchaser, have entered into the Asset Purchase Agreement, pursuant to which the Company will purchase certain assets of AS Kevelt and, as part of the transactions contemplated thereby, Purchaser will purchase from the Company, in installments, one or more additional Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Notes (the "New Note") and the Company will issue to the Purchaser one or more additional Common Stock Purchase Warrants to purchase up to an aggregate 11,666,667 shares of common stock of the Company, par value \$0.01 per share (the "New Warrant").

WHEREAS, the parties have agreed to amend certain provisions of the Securities Purchase Agreement, to reflect the purchase of the New Note and the issuance of the New Warrant.

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

**ARTICLE I.
Amendments**

1.1 Amendments.

(a) The definition of "Note", "Registration Rights Agreement", "Security Agreement", "Subsidiary Guarantee", "Securities", "Transaction Documents" and "Warrant" in Section 1.1. of the Securities Purchase Agreement is hereby deleted in its entirety and replaced with the following:

"Note" means the Original Note and the New Note.

"Registration Rights Agreement" means the Registration Rights Agreement, dated the date hereof, among the Company and the Purchaser, in the form of Exhibit B attached hereto, as such may be amended from time to time.

“Securities” means the Note, the Warrant, the Underlying Shares and the Parent New Shares (as defined in the Asset Purchase Agreement).

“Security Agreement” means the Security Agreement, dated the date hereof, among the Company and the Purchaser, in the form of Exhibit E attached hereto, as such may be amended from time to time.

“Subsidiary Guarantee” means the Subsidiary Guarantee, dated the date hereof, by each Subsidiary in favor of the Purchaser, in the form of Exhibit F attached hereto, as such may be amended from time to time.

“Transaction Documents” means this Agreement, the Note, the Registration Rights Agreement, the Security Agreement, the Subsidiary Guarantee, the Warrant, the Asset Purchase Agreement, and all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Warrant” means the Original Warrant, the New Warrant and the Management Warrants, provided however, no additional warrants shall be issuable pursuant to Section 2.1 or 2.5 of the Securities Purchase Agreement with respect to the Management Warrants.

(b) The following definitions are hereby added to Section 1.1 of the Securities Purchase Agreement in the appropriate alphabetical order:

“Additional Closing Date” means the date of this Amendment.

“Asset Purchase Agreement” means that certain Asset Purchase Agreement, dated as of November [], 2015, as amended, among AS Kevelt, OJSC Pharmsynthez, Xenetic Biosciences, Inc. and Lipoxen Technologies, Ltd.

“Management Warrants” means the Common Stock Purchase Warrant, with a five (5) year term and subject to cashless exercise, issued to certain members of management of the Purchaser on the date of this Amendment, in the form of Exhibit B attached to this Amendment, provided however, no additional warrants shall be issuable pursuant to Section 2.1 or 2.5 of the Securities Purchase Agreement with respect to the Management Warrants.

“New Note” means that certain Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note or Notes issued by the Company, in installments, as set forth on Schedule 1 hereto, in the form of Exhibit A attached to this Amendment.

“New Warrant” means the Common Stock Purchase Warrant or Warrants, with a five (5) year term and subject to cashless exercise, issued to the Purchaser on the date of this Amendment, in the form of Exhibit B attached to this Amendment, and any additional warrants issuable pursuant to Sections 2.1 of the Securities Purchase Agreement or this Amendment or Section 2.5 of the Securities Purchase Agreement, as applicable.

“Original Note” means that certain amended and restated Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note issued by the Company to the Purchaser on July 1, 2015, in the form of Exhibit C attached to this Amendment.

“Original Warrant” means that certain amended and restated Common Stock Purchase Warrant, with a five (5) year term and subject to cashless exercise, issued to the Purchaser on July 1, 2015, in the form of Exhibit D attached to this Amendment, and any additional warrants issuable pursuant to Sections 2.1 or 2.5 of the Securities Purchase Agreement, as applicable.

(c) Section 4.9 of the Securities Purchase Agreement is hereby amended by deleting subsection (a) thereof and replacing it with “[reserved]”.

ARTICLE II. PURCHASE AND SALE

2.1 Purchase. The Purchaser will purchase such additional principal amounts of New Notes as set forth on Schedule 1 hereto. Additionally, along with each New Note, the Company shall issue to Purchaser a New Warrant to purchase a number of shares of the Company’s common stock equal to 50% of the number of shares issuable under the New Note as of the Additional Closing Date. The New Warrant granted shall be in the form and on the terms as attached hereto as Exhibit B. Further, on the Closing Date of the Asset Purchase Agreement, the Company shall issue to Purchaser the Parent New Shares (as defined in the Asset Purchase Agreement). In the event that a Purchaser’s New Note remains outstanding as of the Outside Date (as defined in the Asset Purchase Agreement), the Purchaser shall be granted an additional New Warrant to purchase an additional number of shares of the Company’s common stock equal to 50% of the number of shares issuable under the New Note as of the Additional Closing Date. Further, the Company shall issue the Management Warrants in accordance with Section 2.05 of the Asset Purchase Agreement. The Management Warrants granted shall be in the form and on the terms as attached hereto as Exhibit C.

2 . 2 Closing. Concurrent with the execution of this Amendment, the Company agrees to sell, and the Purchaser agrees to purchase, the Purchaser’s Closing Subscription Amount as set forth on the signature page hereto executed by the Purchaser. At the Closing, the Purchaser shall deliver to the Company, via wire transfer or a certified check, immediately available funds equal to the Purchaser’s Subscription Amount as set forth on the signature page hereto executed by the Purchaser, and the Company shall deliver to the Purchaser its New Note and New Warrant.

2.3 Reaffirmation.

(a) This Amendment has been duly executed and delivered for the benefit of or on behalf of each of the Company and the Purchaser and constitutes, in all material respects, a legal, valid and binding obligation of each of the Company and the Purchaser, enforceable against such party in accordance with its terms except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting creditors’ rights and remedies in general.

(b) After giving effect to this Amendment, the representations and warranties contained in the Securities Purchase Agreement and the other Transaction Documents are true and correct in all material respects.

(c) Except as set forth expressly herein, all terms of the Securities Purchase Agreement, as amended hereby, and the other Transaction Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Company and the Purchaser.

(Signature Pages Follow)

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

XENETIC BIOSCIENCES, INC.

Address for Notice:
Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Mass. 02421
E-mail: s.maguire@xeneticbio.com
Attention: Scott Maguire, CEO
Fax: 781-538-4327

By: _____
Name: M. Scott Maguire
Title: Chief Executive Officer
With a copy to (which shall not constitute notice):

Taft, Stettinius & Hollister LLP
111 E. Wacker Drive, Suite 2800
Chicago, IL 60601
Facsimile: 312-275-7569
E-mail: mgoldsmith@taftlaw.com
Attention: Mitchell D. Goldsmith, Esq.

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SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGE TO AMENDMENT]

IN WITNESS WHEREOF, the undersigned has caused this Securities Purchase Agreement to be duly executed by its authorized signatory as of the date first indicated above.

Name of Purchaser: OJSC "Pharmsynthez"

Signature of Authorized Signatory of Purchaser: _____

Name of Authorized Signatory: Peter V. Kruglyakov

Title of Authorized Signatory: Chief Executive Officer

Email Address of Authorized Signatory: pkruglyakov@pharmsynthez.com

Facsimile Number of Authorized Signatory: 7 (812) 329 8089

Address for Notice to Purchaser: Office center "IT-Park", 25 Liter ZH, Krasnogo Kursanta ul.,
St. Petersburg , 197110 , Russia

Address for Delivery of Securities to Purchaser (if not same as address for notice): Office center "IT-Park", 25 Liter ZH, Krasnogo
Kursanta ul.,
St. Petersburg , 197110 , Russia

Subscription Amount/Principal Amount: US \$[],000,000

Individual Taxpayer Number: 7801075160

Schedule 1

Purchaser will purchase up to \$3.5 million of New Notes based on the following schedule:

1. Within five (5) Business days following the execution of the Asset Purchase Agreement, Purchaser will purchase \$1.5 million of New Notes.
2. Within five (5) Business days of written notice from the Company to Purchaser (provided such notice shall be delivered on or after December 1, 2015) but no later than December 31, 2015, Purchaser will purchase an additional \$1 million of New Notes.
3. Within five (5) Business days of written notice from the Company to Purchaser (provided such notice shall be delivered on or after February 1, 2016) but no later than February 28, 2016, Purchaser will purchase an additional \$1 million of New Notes.

**FORM OF
FIRST AMENDMENT TO REGISTRATION RIGHTS AGREEMENT**

This First Amendment to Registration Rights Agreement (this "Amendment") is dated as of _____ between Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), and the purchaser identified on the signature pages hereto (the "Purchaser").

WHEREAS, the Company and the Purchaser are parties to that certain Registration Rights Agreement, dated as of July 1, 2015 (as the same is being amended by this Amendment, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Registration Rights Agreement"), pursuant to which the Company granted certain registration rights with respect to the Company's common stock, par value \$0.01 per share ("Common Stock"), underlying a \$3 million Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note (the "Original Note") and a Common Stock Purchase Warrant to purchase up to 10 million shares of common stock of the Company, par value \$0.01 per share (the "Original Warrant") which were purchased pursuant to that certain Securities Purchase Agreement, dated June 9, 2015 (the "Securities Purchase Agreement").

WHEREAS, the Company, the Purchaser and AS Kevelt, a subsidiary of the Purchaser, have entered into that certain Asset Purchase Agreement, dated as of November [], 2015 (the "Asset Purchase Agreement"), pursuant to which the Company will purchase certain assets of AS Kevelt and, as part of the transactions contemplated thereby, Purchaser will purchase from the Company one or more additional Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Notes (the "New Notes") and the Company will issue to the Purchaser additional Common Stock Purchase Warrants to purchase up to 11,666,667 shares of common stock of the Company, par value \$0.01 per share (the "New Warrants").

WHEREAS, the parties have amended certain provisions of the Securities Purchase Agreement (the "SPA Amendment"), to reflect the purchase of the New Notes and the issuance of the New Warrants and desire to amend certain provisions of the Registration Rights Agreement to grant the Purchaser registration rights with respect to the shares of Common Stock underlying the New Notes and the New Warrants.

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

**ARTICLE I.
Amendments and Reaffirmation**

1.1 Amendments.

(a) The introductory clause of Section 1 of the Registration Rights Agreement is hereby deleted in its entirety and replaced with the following:

Capitalized terms used and not otherwise defined herein that are defined in the Securities Purchase Agreement, as amended by the SPA Amendment, shall have the meanings given such terms in the Securities Purchase Agreement as such terms may be amended by the SPA Amendment.

(b) The definition of Registrable Securities is hereby deleted in its entirety and replaces with the following:

“Registrable Securities” means, as of any date of determination, (a) all of the shares of Common Stock then issued and issuable upon conversion in full of the Note (assuming on such date the Note is converted in full without regard to any conversion limitations therein), (b) all shares of Common Stock issued and issuable as interest or principal on the Note assuming all permissible interest and principal payments are made in shares of Common Stock and the Note is held until maturity, (c) any additional shares of Common Stock issued and issuable in connection with any anti-dilution provisions in the Note (in each case, without giving effect to any limitations on conversion set forth in the Note), (d) all of the shares of Common Stock then issued and issuable upon exercise in full of the Warrant (assuming on such date the Warrant is converted in full without regard to any conversion limitations therein), (e) any securities issued or then issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing and (f) all other shares of Common Stock issued or issuable to Purchaser or its Affiliates pursuant to the Asset Purchase Agreement; provided, however, that any such Registrable Securities shall cease to be Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) for so long as (a) a Registration Statement with respect to the sale of such Registrable Securities is declared effective by the Commission under the Securities Act and such Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (b) such Registrable Securities have been previously sold in accordance with Rule 144, or (c) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable to the Transfer Agent and the affected Holder (assuming that such securities and any securities issuable upon exercise, conversion or exchange of which, or as a dividend upon which, such securities were issued or are issuable, were at no time held by any Affiliate of the Company), as reasonably determined by the Company, upon the advice of counsel to the Company.

1.2 Reaffirmation.

(a) This Amendment has been duly executed and delivered for the benefit of or on behalf of each of the Company and the Purchaser and constitutes, in all material respects, a legal, valid and binding obligation of each of the Company and the Purchaser, enforceable against such party in accordance with its terms except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting creditors’ rights and remedies in general.

(b) After giving effect to this Amendment, the representations and warranties contained in the Registration Rights Agreement and the other Transaction Documents are true and correct in all material respects.

(c) Except as set forth expressly herein, all terms of the Registration Rights Agreement, as amended hereby, and the other Transaction Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Company and the Purchaser.

(Signature Pages Follow)

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

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title: Chief Executive Officer

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[SIGNATURE PAGE OF PURCHASER TO AMENDMENT TO RRA]

Name of Purchaser: _____

Signature of Authorized Signatory of Purchaser: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

**FORM OF
FIRST AMENDMENT TO SECURITY AGREEMENT**

This First Amendment to Security Agreement (this "Amendment") dated as of _____, is among Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), all of the subsidiaries of the Company (such subsidiaries, the "Guarantors" and together with the Company, the "Debtors") and the holder(s) of the Company's Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note dated July 1, 2015, in the original principal amount of \$3,000,000 (the "Original Note") and the Company's Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Notes (the "New Notes") issued in installments as set forth in the Securities Purchase Agreement, dated as of June 9, 2015, as amended (the "Securities Purchase Agreement") signatory hereto, its endorsees, transferees and assigns (collectively, the "Secured Parties").

WHEREAS, the Company and the Secured Parties are parties to that certain Security Agreement, dated as of July 1, 2015 (as the same is being amended by this Amendment, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), pursuant to which the Company granted a security interest to the Secured Parties in substantially all of the assets of Debtors in connection with the Company's issuance of the Original Note pursuant to the Securities Purchase Agreement.

WHEREAS, the Company and AS Kevelt, a subsidiary of the Secured Parties, has entered into that certain Asset Purchase Agreement, dated as of November [], 2015 (the "Asset Purchase Agreement"), pursuant to which the Company will purchase certain assets of AS Kevelt and, as part of the transactions contemplated thereby, Secured Party will purchase from the Company the New Notes.

WHEREAS, the parties have amended certain provisions of the Securities Purchase Agreement (the "SPA Amendment"), to reflect the purchase of the New Notes and desire to amend certain provisions of the Security Agreement to provide that the security interests granted therein secure the obligations of Debtors under the Original Note and the New Notes.

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

**ARTICLE I.
Amendments and Reaffirmation**

1.1 Amendments.

(a) The introductory clause of Section 1 of the Security Agreement is hereby deleted in its entirety and replaced with the following:

Capitalized terms used and not otherwise defined herein that are defined in the Securities Purchase Agreement, as amended by the SPA Amendment, shall have the meanings given such terms in the Securities Purchase Agreement as such terms may be amended by the SPA Amendment.

(b) Section 1(a) of the Security Agreement is hereby amended by adding the following to the definition of “Collateral” as clause (x) and renumbering current clause (x) as clause (xi):

“(x) All Purchased Assets (as defined in the Asset Purchase Agreement); and”

(c) Section 1(e) of the Security Agreement is hereby deleted in its entirety and replaced with the following:

“Obligations” means all of the liabilities and obligations (primary, secondary, direct, contingent, sole, joint or several) due or to become due, or that are now or may be hereafter contracted or acquired, or owing to, of any Debtor to the Secured Parties, including, without limitation, all obligations under this Agreement, the Note, the New Notes, the Guarantee, and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith, in each case, whether now or hereafter existing, voluntary or involuntary, direct or indirect, absolute or contingent, liquidated or unliquidated, whether or not jointly owed with others, and whether or not from time to time decreased or extinguished and later increased, created or incurred, and all or any portion of such obligations or liabilities that are paid, to the extent all or any part of such payment is avoided or recovered directly or indirectly from any of the Secured Parties as a preference, fraudulent transfer or otherwise as such obligations may be amended, supplemented, converted, extended or modified from time to time. Without limiting the generality of the foregoing, the term “Obligations” shall include, without limitation: (i) principal of, and interest on the Note and New Notes and the loans extended pursuant thereto; (ii) any and all other fees, indemnities, costs, obligations and liabilities of the Debtors from time to time under or in connection with this Agreement, the Note, the New Notes, the Guarantee, and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith; and (iii) all amounts (including but not limited to post-petition interest) in respect of the foregoing that would be payable but for the fact that the obligations to pay such amounts are unenforceable or not allowable due to the existence of a bankruptcy, reorganization or similar proceeding involving any Debtor.

1.2 Reaffirmation.

(a) This Amendment has been duly executed and delivered for the benefit of or on behalf of each of the Company and the Secured Parties and constitutes, in all material respects, a legal, valid and binding obligation of each of the Company and the Secured Parties, enforceable against such party in accordance with its terms except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting creditors’ rights and remedies in general.

(b) After giving effect to this Amendment, the representations and warranties contained in the Security Agreement and the other Transaction Documents are true and correct in all material respects.

(c) Except as set forth expressly herein, all terms of the Security Agreement, as amended hereby, and the other Transaction Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Company and the Secured Parties.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed on the day and year first above written.

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title:

XENETIC BIOSCIENCES (UK) LIMITED

By: _____
Name: M. Scott Maguire
Title:

LIPOXEN TECHNOLOGIES LIMITED

By: _____
Name: M. Scott Maguire
Title:

XENETIC BIOSCIENCE, INCORPORATED

By: _____
Name: M. Scott Maguire
Title:

SYMBIOTEC GMBH

By: _____
Name: M. Scott Maguire
Title:

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[SIGNATURE PAGE OF SECURED PARTIES]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

OPKO Pharmaceuticals, LLC

By: _____

Name: _____

Title: _____

**FORM OF
FIRST AMENDMENT TO SUBSIDIARY GUARANTEE**

This First Amendment to Subsidiary Guarantee (this "Amendment") dated as of _____, 2015, made by each of the signatories hereto (together with any other entity that may become a party hereto as provided herein, the "Guarantors"), in favor of the Purchaser (together with its permitted assigns, the "Purchaser") signatory to that certain Securities Purchase Agreement, dated as of June 9, 2015, as amended, between Xenetic Biosciences, Inc., a Nevada corporation (the "Company") and the Purchaser (the "Securities Purchase Agreement") pursuant to which the Purchaser purchased from the Company a \$3 million Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Note (as amended, the "Original Note" or "Note").

WHEREAS, the Guarantors are parties to that certain Subsidiary Guarantee, dated as of July 1, 2015 (as the same is being amended by this Amendment, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Subsidiary Guarantee"), pursuant to which the Guarantors guaranteed certain obligations of the Company including all obligations of the Company under the Original Note.

WHEREAS, the Company and AS Kevelt, a subsidiary of the Purchaser, have entered into that certain Asset Purchase Agreement, dated as of November [], 2015 (the "Asset Purchase Agreement"), pursuant to which the Company will purchase certain assets of AS Kevelt and, as part of the transactions contemplated thereby, the Purchaser will purchase from the Company additional Ten Percent (10%) Senior Secured Collateralized Convertible Promissory Notes (the "New Notes").

WHEREAS, the parties have amended certain provisions of the Securities Purchase Agreement (the "SPA Amendment"), to reflect the purchase of the New Notes and desire to amend certain provisions of the Subsidiary Guarantee to provide that the Guarantors shall guarantee the obligations of the Company under the New Notes as well as all other obligations of the Company originally guaranteed by the Subsidiary Guarantee.

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

**ARTICLE I.
Amendments and Reaffirmation**

1.1 Amendments.

(a) The introductory clause of Section 1 of the Subsidiary Guarantee is hereby deleted in its entirety and replaced with the following:

Capitalized terms used and not otherwise defined herein that are defined in the Securities Purchase Agreement, as amended by the SPA Amendment, shall have the meanings given such terms in the Securities Purchase Agreement as such terms may be amended by the SPA Amendment.

(b) The definition of “Obligations” set forth Section 1 of the Subsidiary Guarantee is hereby deleted in its entirety and replaced with the following:

“**Obligations**” means, in addition to all other costs and expenses of collection incurred by the Purchaser in enforcing any of such Obligations and/or this Guarantee, all of the liabilities and obligations (primary, secondary, direct, contingent, sole, joint or several) due or to become due, or that are now or may be hereafter contracted or acquired, or owing to, of the Company or any Guarantor to the Purchaser, including, without limitation, all obligations under this Guarantee, the Note, the New Notes, the Security Agreement and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith, in each case, whether now or hereafter existing, voluntary or involuntary, direct or indirect, absolute or contingent, liquidated or unliquidated, whether or not jointly owed with others, and whether or not from time to time decreased or extinguished and later increased, created or incurred, and all or any portion of such obligations or liabilities that are paid, to the extent all or any part of such payment is avoided or recovered directly or indirectly from the Purchaser as a preference, fraudulent transfer or otherwise as such obligations may be amended, supplemented, converted, extended or modified from time to time. Without limiting the generality of the foregoing, the term “Obligations” shall include, without limitation: (i) principal of, and interest on the Note and the New Notes and the loans extended pursuant thereto; (ii) any and all other fees, indemnities, costs, obligations and liabilities of the Company or any Guarantor from time to time under or in connection with this Guarantee, the Note, the New Notes, the Security Agreement and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith; and (iii) all amounts (including but not limited to post-petition interest) in respect of the foregoing that would be payable but for the fact that the obligations to pay such amounts are unenforceable or not allowable due to the existence of a bankruptcy, reorganization or similar proceeding involving the Company or any Guarantor.

1.2 Reaffirmation.

(a) This Amendment has been duly executed and delivered for the benefit of or on behalf of each of the Guarantors and the Purchaser and constitutes, in all material respects, a legal, valid and binding obligation of each of the Guarantors, enforceable against such party in accordance with its terms except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting creditors’ rights and remedies in general.

(b) After giving effect to this Amendment, the representations and warranties contained in the Subsidiary Guaranty and the other Transaction Documents are true and correct in all material respects. Except as set forth expressly herein, all terms of the Subsidiary Guarantee, as amended hereby, and the other Transaction Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Guarantors.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed on the day and year first above written.

XENETIC BIOSCIENCES, INC.

By: _____
Name: M. Scott Maguire
Title:

XENETIC BIOSCIENCES (UK) LIMITED

By: _____
Name: M. Scott Maguire
Title:

LIPOXEN TECHNOLOGIES LIMITED

By: _____
Name: M. Scott Maguire
Title:

XENETIC BIOSCIENCE, INCORPORATED

By: _____
Name: M. Scott Maguire
Title:

SYMBIOTEC GMBH

By: _____
Name: M. Scott Maguire
Title:

FORM OF

Transition, Services and Resupply Agreement

15-8-311

by and among

AS Kevelt,

OJSC Pharmsynthez

and

Xenetic Biosciences, Inc.

Transition and Resupply Agreement

This Transition, Services and Resupply Agreement (the “Transition and Resupply Agreement”), dated as of October __, 2015 (“Effective Date”) is entered into among AS Kevelt, an Estonian pharmaceutical company (“Kevelt”), OJSC Pharmsynthez, a Russian pharmaceutical company and parent of Kevelt (“Pharmsynthez”) and Xenetic Biosciences, Inc., a Nevada corporation (“**Xenetic**”).

RECITALS

WHEREAS, Xenetic has acquired all the assets, intellectual property and material related to Virexxa for any Permitted Uses from Kevelt and Pharmsynthez through an Asset Purchase Agreement entered into on October __, 2015 (the “Agreement”);

WHEREAS, Xenetic in accepting the transfer of the assets, intellectual property and material related to Virexxa has also taken on all rights to continue any ongoing clinical trials, though not the obligation to do so, initiate any new preclinical and/or clinical trials, obtain marketing authorization, distribute, offer to sell and sell Virexxa worldwide;

WHEREAS, the Agreement contemplates that Kevelt and Pharmsynthez will continue to manufacture and supply for research, clinical and commercial purposes Virexxa to Xenetic and if requested, transfer the manufacturing to a Xenetic or a third party selected by Xenetic to supply and manufacture Virexxa; and

WHEREAS, Kevelt and Pharmsynthez wish to fulfill the commitments set forth in this Transition and Resupply Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants hereinafter set forth, the sufficiency of which is hereby acknowledged, Xenetic, Kevelt and Pharmsynthez (individually each referred to as a “Party” and collectively as “Parties”) hereby agree as follows:

Article I. Definitions

Any capitalized terms not defined in this Transition and Resupply Agreement shall have the meaning given such term(s) in the Agreement. Any references in this Transition and Resupply Agreement to “Articles” and/or “Sections” shall refer to Articles and/or Sections of this Transition and Resupply Agreement, unless specified to be referring to Articles and/or Sections of the Agreement. For purposes of this Transition and Resupply Agreement, the following capitalized terms, whether used in the singular or plural, shall have the following meanings:

Section 1.01 “Kevelt/Pharmsynthez Manufacturing Know-How” means Virexxa batch formula and production related data, methods, processes, standard operating procedures (“SOP”), and relevant proprietary information together with all applicable improvements, that are owned by Kevelt and Pharmsynthez or their Affiliates.

Section 1.02 “Kevelt/Pharmsynthez Patents” means the Patents Owned by Kevelt and/or Pharmsynthez and their Affiliates as of the Effective Date having one or more valid and unexpired claims (i) that cover Virexxa; or (ii) that cover processes directed to formulating and manufacturing Virexxa. For purposes of this Transition and Resupply Agreement, the phrase “valid and unexpired claim” shall mean a composition of matter, method of use or method of manufacture claim (or equivalent thereof) of an issued and unexpired Patent, or a composition of matter, method of use or method of manufacture claim (or equivalent thereof) of a pending application, which (i) has not been revoked or held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal; and (ii) has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise.

Section 1.03 “Deliver” or “Delivery,” with respect to Virexxa means, and shall take place upon, the transfer of possession of Virexxa to a Xenetic EXW (Incoterms 2010) at the place the Virexxa will be shipped to Xenetic.

Section 1.04 “Excluded Uses” shall mean the use of Virexxa in the Retained Territory for the treatment of all diseases included in Exhibit A (Indications for Excluded Uses).

Section 1.05 “Permitted Uses” shall mean the use of Virexxa and the Intellectual Property for the treatment of all diseases and conditions other than the Excluded Uses. Permitted Uses shall include but not be limited to the treatment of cancer indications and the use of the Intellectual Property as an immune modulator or in association with interferon.

Section 1.06 “Specification(s)” means the requirements, standards, quality control testing and other attributes pertaining to Virexxa, as set forth in a specification that shall be agreed upon by the Parties following the entry of the Parties into this Transition and Resupply Agreement and as approved by the appropriate governmental agencies and bodies.

Section 1.09 “Virexxa” shall mean medicinal product Sodium Cridanimod (**Virexxa®**) (**Oxidihydroacridinylacetate sodium** containing a Sodium 2-(9-oxoacridin-10-yl) acetate, any derivatives, isomers, substitutions or any other form, as an active pharmaceutical ingredient, developed by Kevelt and/or Pharmsynthez and having properties described in the Chemical, Manufacturing and Controls (“CMC”) and medicinal product dossier (“MPD”) for the Permitted Uses.

Article II.

Manufacture and Supply, Technology Transfer and Transition

Section 2.01 **Virexxa Manufacturing Procedures, Standards and Compliance with Laws.** All Virexxa used for pre-clinical, clinical and commercial purposes but not more than a maximum of 5,000 ampoules per month at 250 mg per ampoule or total equivalent amount will be manufactured, tested and released as described in the most current version of the CMC (Annex [B].) by Kevelt and/or Pharmsynthez according to established current good manufacturing practices (“cGMPs”) and agreed upon by the Parties standard operating procedures (SOPs) , and applicable corresponding regulations in any country where the Virexxa CMC is approved for pre-clinical, clinical and/or commercial purposes, including, but not limited to those required by the United States Food and Drug Administration (FDA) and the European Medicines Agency (EMA). During the term of this Transition and Resupply Agreement, Kevelt and/or Pharmsynthez will be fully responsible for maintaining its facilities and procedures, in compliance with cGMPs, standards that are agreed upon by the Parties and applicable corresponding regulations.

Section 2.02 **Certificate of Analysis.** Kevelt and/or Pharmsynthez shall deliver to Xenetic with fulfillment of each Virexxa order a certificate of analysis confirming that such order meets the Specifications applicable to Virexxa (each, a “Certificate of Analysis”) and a certificate of compliance of such order. Kevelt and/or Pharmsynthez shall test manufactured batches hereunder in accordance with approved specifications covered by the CMC. Xenetic shall be responsible for reasonable inspection of each order for physical damage in shipping and storage. Within thirty (30) days after receipt of each order of Virexxa, at Xenetic together with Kevelt’s and or Pharmsynthez’s Certificate of Analysis and certificate of compliance pertaining to each such order, Xenetic shall notify Kevelt and/or Pharmsynthez if, in Xenetic’s determination, such order fails to conform to the Specifications. Xenetic shall provide written notice of rejection of the applicable order to Kevelt and/or Pharmsynthez within such thirty (30) day period. Orders not rejected within such thirty (30) day period in a written notice of rejection sent to Kevelt and/or Pharmsynthez shall be deemed to have been accepted by Xenetic. Once Xenetic accepts an order of Virexxa within the thirty (30) day period, it shall not have the right to reject such order thereafter. If Xenetic determines that such order does not conform to Specifications, it shall send to Kevelt and/or Pharmsynthez, via fax, email, overnight delivery service or certified mail, return receipt requested, within such thirty (30) business day period a written notice of rejection with a reasonably detailed description setting forth the reasons the order is being rejected, along with a sample of the rejected order to Kevelt and/or Pharmsynthez. If Kevelt and/or Pharmsynthez agree that the order is defective or non-conforming, it will, at its option (i) replace such order, though such replacement shall not include material that was rejected and reprocessed to meet the required specification, or (ii) reimburse Xenetic its out-of-pocket costs paid for such material. Furthermore, Kevelt and Pharmsynthez shall pay for the shipping cost associated with the delivery of the replacement order, if any. If Kevelt and/or Pharmsynthez do not agree with Xenetic’s determination that such order is defective or non-conforming, then after reasonable efforts to resolve the disagreement, either Party may submit a sample from the order to a mutually agreed upon independent third party laboratory for resolution of the dispute. The independent laboratory’s results shall be final and binding. Unless otherwise agreed to by the Parties in writing, the costs associated with such testing and review shall be borne by the Party against whom the independent laboratory rules. For purposes of this Section 2.02, the thirty (30) day period shall commence on the date of Xenetic’s receipt of the order and the related Certificate of Analysis.

Section 2.03 **Replacement of Defective Item.** IN ACCORDANCE WITH THE TERMS SET FORTH IN THIS TRANSITION AND RESUPPLY AGREEMENT, KEVELT AND/OR PHARMSYNTHEZ SHALL REPLACE, AT ITS SOLE EXPENSE, ALL ITEMS THAT DO NOT COMPLY OR ARE FOUND NOT TO COMPLY WITH THE SPECIFICATIONS (“DEFECTIVE ITEM”), OR SHALL CREDIT XENETIC FOR AMOUNTS ALREADY PAID FOR THE DEFECTIVE ITEM. THE OBLIGATION OF KEVELT AND/OR PHARMSYNTHEZ TO REPLACE DEFECTIVE ITEMS IN ACCORDANCE WITH THE SPECIFICATIONS OR PROVIDE CREDIT SHALL BE XENETIC’S SOLE AND EXCLUSIVE REMEDY UNDER THIS TRANSITION AND RESUPPLY AGREEMENT FOR DEFECTIVE ITEMS, AND IS IN LIEU OF ANY OTHER REMEDY, EXPRESS OR IMPLIED.

Section 2.04 **Delivery.** Kevelt and/or Pharmsynthez shall tender Virexxa for delivery, EXW Tallinn (Incoterms 2010). Xenetic shall be responsible for all costs and risk of loss associated with the shipping of Virexxa, other materials shipped (from and after Delivery) and shipping instructions.

Section 2.05 **Manufacture of Virexxa.**

(a) **Manufacture.** With respect to Virexxa, from the Effective Date, Kevelt and Pharmsynthez will be responsible for supplying Xenetic with Virexxa under the following terms and conditions:

(i) **Forecasting.** In accordance with Section 2.01, Virexxa shall be supplied by Kevelt and/or Pharmsynthez to Xenetic in an amount that does not exceed 5,000 ampoules of Virexxa per month. On or before the first day of each calendar month, Xenetic shall furnish to Kevelt and/or Pharmsynthez a written six (6) month rolling forecast of the quantity of Virexxa that Xenetic estimates it will order from Kevelt and/or Pharmsynthez during such six (6) month forecast period (the “Forecast”; the first of which is attached hereto as Schedule 1). The first three (3) months of each Forecast shall constitute a binding order for the quantities of Virexxa specified therein (the “Firm Commitment”), and the following three (3) months of the Forecast shall be non-binding, good faith estimates.

(ii) Purchase Orders. On or before the first (1st) day of each calendar month, Xenetic shall submit a purchase order for the Firm Commitment portion of the Forecast, as to which no purchase order has been previously submitted, which specifies the actual quantities of Virexxa to be delivered to Xenetic hereunder for the relevant calendar month and the requested shipping dates for each order (“Purchase Order”). As the Forecast contains Firm Commitments for the first three (3) months, the Purchase Orders to be presented during such months, may vary in quantities through such three (3) months, but the summarized quantities for the said period must meet the quantities as stated in the Firm Commitment. All Purchase Orders shall reflect orders of a size that the Parties have agreed are within the reasonably anticipated capacity of Kevelt and/or Pharmsynthez.

(iii) Raw Material or Capacity Shortage. In the event that Kevelt and/or Pharmsynthez is unable to supply Xenetic with Virexxa in the quantities ordered by Xenetic in accordance with Section 2.05(a)(ii), due to Kevelt’s and/or Pharmsynthez’s insufficient supplies of raw materials necessary to manufacture Virexxa or other manufacturing capacity constraints, Kevelt and/or Pharmsynthez shall use commercially reasonable efforts to equitably allocate available raw materials or manufacturing capacity, as the case may be, in a manner consistent with the Parties’ anticipated needs. Notwithstanding the foregoing, Kevelt and/or Pharmsynthez shall prioritize allocation of manufacturing capacity and raw materials to the manufacture of Virexxa for Xenetic.

(iv) Xenetic Modification or Cancellation. Xenetic may request modification of the delivery date or quantity of Virexxa in a Purchase Order only by submitting a written change order to the Party to whom such Purchase Order was submitted, though such modification request shall not change the amount of Virexxa Xenetic is to purchase based on the then relevant Forecast as set forth in Section 2.05(a)(i). Such change order shall be effective and binding against the Party to whom the Purchase Order was submitted only upon written acceptance by such Party. Notwithstanding the foregoing, Xenetic shall remain responsible for the Firm Commitment portion of the Forecast. The manufacturing Party (Kevelt and/or Pharmsynthez) shall notify Xenetic of its approval or rejection of any such change order within fourteen (14) business days after receipt thereof.

(v) Transitional Period Plan. Upon notice by Xenetic of Xenetic’s intent to transfer the manufacturing to itself or a third party manufacturer selected by Xenetic at Xenetic’s sole discretion, the Parties shall negotiate in good faith and devise a transitional period plan which will set forth, among other things, the Parties’ responsibilities relating to the manufacture of Virexxa during the transfer of manufacturing technology from Kevelt and/or Pharmsynthez to Xenetic, the time frame for such transfer, and the Parties’ mutually determined collaborative and comprehensive plan that will ensure a supply of Virexxa and a smooth transition of manufacturing of Virexxa from Kevelt and/or Pharmsynthez to Xenetic.

Section 2.06 **Technology Transfer.** The Parties shall cooperate to expedite transfer of Kevelt's and Pharmsynthez's Virexxa manufacturing technology to a facility designated by Xenetic, where Virexxa manufacturing will be conducted by or on behalf of Xenetic. Kevelt and Pharmsynthez will make employees of appropriate skill and experience reasonably available to Xenetic to facilitate such transfer. Kevelt, Pharmsynthez and Xenetic will cooperate to minimize the expenses associated with such transfer and to ensure that the transfer of Virexxa manufacturing is effectively coordinated.

Section 2.07 **Hiring of Employees.** With the written consent of the Party from whom such employees are to be hired, such consent not to be unreasonably withheld, Xenetic shall have the right, but not the obligation, to hire or contract with Kevelt and Pharmsynthez employees, including those Kevelt and Pharmsynthez employees that are involved in the manufacture, quality assurance, quality control, packaging and clinical and commercial regulatory approvals for Virexxa, as are needed to facilitate the transfer of Virexxa to Xenetic's facility or one selected by Xenetic. Any such hiring decisions, and the terms thereof, shall be solely at Xenetic's discretion. To the extent requested by Xenetic, Kevelt and Pharmsynthez shall assist Xenetic in making its hire/no hire decision regarding Kevelt and Pharmsynthez employees.

Section 2.08 **Costs of Technology Transfer.** Except for such costs to be borne by Kevelt and Pharmsynthez as set forth herein, Xenetic shall be solely responsible for any and all costs associated with the transfer of manufacturing of Virexxa to the facility where Virexxa is to be manufactured by or on behalf of Xenetic. To facilitate the transfer, Kevelt and Pharmsynthez shall provide all employees necessary to effectuate the transfer at minimum cost to Xenetic, other than reimbursement to Kevelt and Pharmsynthez of out-of-pocket expenses related thereto. Kevelt and Pharmsynthez shall be responsible for all costs associated with their termination of manufacturing Virexxa (including any severance or other payments owed to employees following the termination of manufacturing Virexxa by Kevelt and Pharmsynthez).

Section 2.09 **Batch Records and Data.** Upon Xenetic's request, within thirty (30) days following Delivery of a lot of Virexxa, Kevelt and Pharmsynthez shall provide Xenetic with properly completed copies of batch records consisting of complete information relating to the production operations and the controls of each batch; provided, however, that if testing reveals an "out-of-Specification" result, Kevelt and Pharmsynthez shall provide such batch records within seven (7) days following resolution of the "out-of-Specification" result. The Parties agree that Kevelt and Pharmsynthez shall provide these records to Xenetic solely for the purpose of assisting with the transfer of Virexxa manufacturing technology, and Xenetic shall not bear the responsibility for correction of any "out-of-Specification" results.

**Article III.
Transition**

Section 3.01 Kevelt and/or Pharmsynthez Provision of Information and Documents to Xenetic

- (a) Following entry of the Parties into this Transition and Resupply Agreement, Kevelt and Pharmsynthez shall provide to Xenetic the following within thirty sixty (60) days of the Effective Date:
- (i) a list all notebooks, records, data, results, information, filings, regulatory papers submissions and submission related correspondence and information regarding Virexxa requested or ordered by Xenetic or known by Kevelt and/or Pharmsynthez to be necessary for Xenetic to carry out the research, development and commercialization of Virexxa® pursuant to the terms of the IP Asset Purchase Agreement, whether in paper, electronic or some other form, including their location, the identity of all individuals with access to them and the date such notebooks, records, data, results, information, filings, regulatory papers, information shall be provided to Xenetic;
 - (ii) all copies of original notebooks, records, data, results, filings, submissions and submission related correspondence regulatory papers and information regarding Virexxa, whether in paper, electronic or some other form;
 - (iii) a list of all Approved Suppliers to Kevelt and/or Pharmsynthez that have been, are or will be involved in the research, development, commercialization, testing or manufacturing of Virexxa, including their addresses and contact information;
 - (iv) a list of all information, know-how and/or trade secrets in the possession of Kevelt and/or Pharmsynthez that relate in any manner to Virexxa for the Permitted Uses
 - (v) a list identifying all current stocks of Virexxa in the possession of Kevelt and/or Pharmsynthez or their Affiliates, contractors, or other third parties contracted in any manner by Kevelt and/or Pharmsynthez and the date upon which ownership such stocks of Virexxa shall be transferred to Xenetic, a valuation of the value of such stocks of Virexxa and instructions provided to Xenetic to effectuate the transfer of such stocks of Virexxa to Xenetic; and,
 - (vi) copies of all documents and records related to communications with regulatory authorities relating to the Permitted Uses, including, those related to current or previous clinical development, manufacturing, product safety and pharmacovigilance.
 - (vii) copies of all documents and records related to the manufacture of Virexxa, including, the manufacture of bulk API as well as final drug product.
 - (viii) any other material information or records related in any manner to Virexxa for the Permitted Uses.

Article IV.
Records; Regulatory Matters

Section 4.01 **Record keeping.** Kevelt and/or Pharmsynthez shall maintain true and accurate books, records, test and laboratory data, reports and all other information relating to manufacturing under this Transition and Resupply Agreement, including all information required to be maintained by applicable laws and regulations, including but not limited to cGMP. Such information shall be maintained in forms, notebooks and records for a period of at least one (1) years from the relevant finished Virexxa expiration date, or longer if required under applicable laws.

Section 4.02 **Regulatory Responsibility and Compliance.**

- (a) Kevelt and/or Pharmsynthez agrees to use commercially reasonable efforts to cause, within three (3) months after the Effective Date, the transfer of title and ownership to Xenetic of any and all regulatory approvals and related regulatory filings relating to Virexxa for the Permitted Uses which are owned by Kevelt and/or Pharmsynthez and are filed, issued and in full force and effect as of the Effective Date.
- (b) Kevelt and/or Pharmsynthez shall be responsible for transferring according to Section 4.02(a) and Xenetic shall be responsible for obtaining and maintaining any establishment licenses or permits required by the FDA or other regulatory authorities, by applicable laws or by regulatory authorities that pertain to Virexxa manufacturing. Kevelt and/or Pharmsynthez hereby grant to Xenetic the right to reference such establishment files for the purpose of obtaining and maintaining regulatory approval.

Section 4.03 **Governmental Inspections and Requests.** Kevelt and/or Pharmsynthez shall advise Xenetic within three (3) Business Days if an authorized agent of any regulatory authority visits a facility where manufacturing activity with respect to Virexxa takes place, where the interest of the regulatory authority is specifically related to manufacturing activity with respect to Virexxa. In such circumstance, Kevelt and/or Pharmsynthez shall furnish to Xenetic a copy of sections of the report by such regulatory authority, which are specifically related to Virexxa within five (5) days of receipt of such report if such report is received in English by Kevelt and/or Pharmsynthez. If the sections of the report by such regulatory authority are not in English, the receiving Party shall translate the sections of the report into English and shall provide such translated sections of the report to Xenetic within ten (10) days of receipt of such report. Further, upon receipt of a regulatory authority written request to inspect a Kevelt and/or Pharmsynthez manufacturing facility, or to audit Kevelt's and/or Pharmsynthez's books and records with respect to manufacturing of Virexxa under this Transition and Resupply Agreement, Kevelt and/or Pharmsynthez shall notify Xenetic thereof within three (3) days, and shall provide Xenetic with a copy of any written document received from such regulatory authority if the document is written in English. If the document is not written in English, Pharmsynthez and/or Kevelt shall provide Xenetic with an English translation within ten (10) days of the receipt of the document. Kevelt and/or Pharmsynthez shall provide Xenetic with notice of any such non-written inspection request from a regulatory authority which specifically relates to Virexxa as promptly as reasonably practicable under the circumstances. Kevelt and/or Pharmsynthez shall also provide to Xenetic such notice as is reasonably practicable under the circumstances of any action by a regulatory authority, resulting from an inspection of a facility where manufacturing activity with respect to Virexxa takes place, which is reasonably anticipated to materially affect Kevelt's and/or Pharmsynthez's ability to perform its obligations under this Transition and Resupply Agreement. Nothing in this Section 4.03 shall require Kevelt and/or Pharmsynthez to submit to Xenetic any books, records, data or information relating to the manufacture or distribution of any products other than Virexxa.

Section 4.04 **Recall and Field Corrective Action.**

This Section 4.04 shall govern recall arising after the Effective Date from Virexxa manufactured by Kevelt and/or Pharmsynthez for Xenetic. In the event that Xenetic believes a recall, field alert, Virexxa withdrawal, or field corrective action may be necessary with regard to Virexxa provided to Xenetic under this Transition and Resupply Agreement, Xenetic shall immediately notify Kevelt and/or Pharmsynthez in writing. Xenetic shall provide reasonable cooperation and assistance to Kevelt and/or Pharmsynthez required to allow Kevelt and/or Pharmsynthez to respond to a recall, field alert, Virexxa withdrawal, or field corrective action. The cost of a Virexxa product related recall, field alert Virexxa withdrawal or field corrective action shall be borne by Kevelt and/or Pharmsynthez if such recall, field alert, Virexxa withdrawal, or field corrective action is caused in material part by Kevelt and/or Pharmsynthez's breach of its obligations under this Transition and Resupply Agreement, or applicable laws, or by its willful misconduct. Xenetic shall bear responsibility for the cost of a Virexxa product related recall, field alert Virexxa withdrawal or field corrective action for all other reasons.. For purposes of this Section 4.04, the Party bearing the costs of any recall, field alert, Virexxa withdrawal, or field corrective action shall only be required to reimburse the other Party for reasonable, actual and documented out-of-pocket costs incurred by such other Party for such recall, field alert, Virexxa withdrawal, or field corrective action (including costs of retrieving Virexxa already delivered to customers, costs and expenses such other Party is required to pay for notification, shipping and handling charges, and all other costs reasonably related to such recall, field alert, Virexxa withdrawal, or field corrective action), and the cost to replace, or the actual replacement of Virexxa.

Section 4.05 **Quality Agreement.** The Parties shall execute a separate Quality Agreement, which will reflect the division of quality responsibilities while Virexxa is manufactured, released and supplied by Kevelt and/or Pharmsynthez for Xenetic ("Quality Agreement"). Kevelt and/or Pharmsynthez shall use commercially reasonable efforts to comply with the Quality Agreement, but in any event shall comply with applicable laws. In the event of a conflict between the terms of this Transition and Resupply Agreement and the Quality Agreement, this Transition and Resupply Agreement shall control, unless the issues relate to quality wherein the Quality Agreement shall control. Kevelt and/or Pharmsynthez shall in any event comply with applicable laws. The failure of a Party to comply with a requirement of the Quality Agreement shall not be actionable, unless it constitutes a material violation of law of any jurisdiction in which Virexxa is distributed.

Section 4.06 **Quality, Environmental, Health and Safety Audits.** Kevelt and/or Pharmsynthez shall permit Xenetic's personnel or authorized representative, upon reasonable notice, at reasonable intervals, and for reasonable duration during regular business hours, to visit the facility where Virexxa is manufactured, tested, or stored by, or on behalf of, Kevelt and/or Pharmsynthez; or to audit compliance with this Transition and Resupply Agreement, however, that such audits shall be conducted not more than twice in any twelve (12) month period, other than "for cause" audits, which Xenetic shall be entitled to conduct following the implementation of measures in response to letters from the FDA to Kevelt and/or Pharmsynthez pertaining to the manufacture of Virexxa.

All information obtained by Xenetic in any such review, including without limitation the findings and results related thereto, shall be deemed Kevelt and/or Pharmsynthez Confidential Information. Kevelt and/or Pharmsynthez will have responsibility to audit its permitted subcontractors and suppliers at reasonable intervals for compliance with (i) the Specifications, (ii) current GMPs, and (iii) applicable laws. Xenetic shall have the right to confirm audits of subcontractors and suppliers of Kevelt and/or Pharmsynthez for Virexxa manufactured under this Transition and Resupply Agreement.

Section 4.07 **Complaints and Adverse Events.** The Party responsible for all permits and licenses required by any regulatory authority with respect to Virexxa under this Transition and Resupply Agreement, including any product licenses, applications and amendments in connection therewith, shall be responsible for evaluating and investigating complaints and for reporting all Adverse Events to regulatory authorities in any country Virexxa is used and/or sold. If the responsible Party becomes aware of any Adverse Event, it shall evaluate, investigate and determine the necessity of reporting all information in its possession regarding such Adverse Event as soon as practicable, in order to fulfill regulatory reporting obligations within the time frames required by regulatory authorities and law; provided, however, that Kevelt and/or Pharmsynthez shall not be required to communicate with customers of Xenetic. The Parties will comply with all applicable reporting laws, rules and regulations governing Adverse Events. Xenetic and Kevelt and/or Pharmsynthez agree to supply all complaint information (including Adverse Event information) to the responsible Party within three (3) Business Days of learning of a complaint or event; to cooperate with investigations and corrective actions; and to comply with all applicable reporting laws, rules and regulations governing Adverse Events.

Section 4.08 **Compliance.** The obligations of Kevelt and/or Pharmsynthez and Xenetic set forth in this Article 4 are intended to comply with the laws, rules and regulations of each country in which Virexxa is approved. The requirements of this Article 4 shall therefore be construed and interpreted to comply with all such laws, rules and regulations. To the extent provisions of this Article 4 do not adequately reflect any such law, rule or regulation, such provisions shall be revised to the extent reasonably necessary to make such provisions legal and valid in accordance with such laws, rules and regulations.

Article V.
Cost for Manufacturing and Supply of Virexxa to Xenetic

Section 5.01 **Virexxa Manufacturing and Supply Costs.** Xenetic shall pay to the manufacturer of Virexxa, Kevelt and/or Pharmsynthez all the manufacturing cost of Virexxa, which includes, but is not limited to, all direct costs related to the manufacturing of Virexxa and related operational expenses as stated in the pre-approved costs specifications (which forms an annex of this Transition, Manufacturing and Supply Agreement, plus fifteen percent (15%) on a per unit basis (“Purchase Price”). Xenetic shall be entitled to audit such manufacturing costs pursuant to the terms of this Transition and Resupply Agreement.

Section 5.02 **Invoicing.** Kevelt and/or Pharmsynthez shall provide Xenetic with an invoice following the delivery of Virexxa. Xenetic shall pay Kevelt and/or Pharmsynthez within thirty (30) days of the receipt of an invoice.

Section 5.03 **Currency.** Unless otherwise agreed by the Parties in writing, all amounts paid by Xenetic under this Transition- and Resupply Agreement shall be paid to Kevelt and/or Pharmsynthez in Euros by wire transfer to a financial institution to be designated by Kevelt and/or Pharmsynthez. Subject to Section 5.02, such payments shall be without deduction of collection, wire transfer or other charges, and, specifically, without deduction of withholding or similar taxes or other government imposed fees or taxes. The pre-approved cost specification shall state a currency exchange rate range based on which the Purchase Price is determined. In case the currency exchange rate fluctuation exceeds such rate range, the Purchase Price shall be modified by the percentage exceeding the agreed range.

Section 5.04 **Interest Due.** In case of any delay in payment by Xenetic to Kevelt and/or Pharmsynthez, interest on the overdue payment shall accrue at an annual interest rate equal to seven and one half percent (7.5%), except to the extent that a regulatory or other governmental agency requires that the annual interest rate exceed that stated in this Section 5.04, the rate shall be raised to that set forth by the regulatory or other governmental agency with the understanding that Kevelt and/or Pharmsynthez shall provide documentary verification that such rate increase is legally required. The foregoing interest shall be due from Xenetic without any special notice, and shall be in addition to any other remedies that Kevelt and/or Pharmsynthez may have pursuant to this Transition- and Resupply Agreement.

Section 5.05 **Taxes.** The Parties agree that any taxes that either Party is required by law to withhold from amounts payable to the other Party under this Transition- and Resupply Agreement (whether under this Article 5 or otherwise) shall be deducted by the paying Party from the amounts paid to the non-paying Party hereunder at the rate(s) required by applicable law, and shall be promptly paid to the appropriate governmental authority on behalf of the non-paying Party. However, the pre-approved cost specification as stated in the annex of this Transition, Manufacturing and Supply Agreement, shall state the Purchase Price after all such tax withholdings. The paying Party shall promptly provide to the non-paying Party receipts from the government or taxing authority evidencing payment of such taxes, if available, or other written proof of payment if official receipts are not available, and shall provide reasonable assistance to the non-paying Party to obtain tax credits therefor.

Section 5.06 **Manufacturing Cost Audit.** Upon the written request of Xenetic, Kevelt and/or Pharmsynthez shall permit an independent certified public accounting firm of recognized national standing in the United States, selected by Xenetic and reasonably acceptable to Kevelt and/or Pharmsynthez, at the Xenetic's expense, to have access to Kevelt's and/or Pharmsynthez's records related to all manufacturing costs billed to Xenetic as may be reasonably necessary to verify the accuracy of any amounts payable by Xenetic to Kevelt and/or Pharmsynthez under this Transition- and Resupply Agreement. Such audits shall be conducted under conditions of confidentiality and may be made no more than once each calendar year, during normal business hours at reasonable times mutually agreed by the Parties. If the audit discloses that the manufacturing costs charged to Xenetic by Kevelt and/or Pharmsynthez was over twelve and a half percent (12.5%) higher than the actual manufacturing costs, then Kevelt and/or Pharmsynthez shall pay the reasonable fees and expenses charged by such accounting firm and reimburse Xenetic the amount overcharged along with a charge of ten percent (10%) interest on the amount overcharged.

Article VI. Representations and Warranties

Section 6.01 Representations and Warranties of KEVELT AND/OR PHARMSYNTHEZ.

(a) Authorization. Kevelt and/or Pharmsynthez, jointly and severally, represents, warrants and covenants that:

(i) this Transition- and Resupply Agreement has been duly executed and delivered by Kevelt and/or Pharmsynthez and constitutes a valid and binding obligation of Kevelt and/or Pharmsynthez, enforceable against Kevelt and/or Pharmsynthez in accordance with its terms, except as enforceability may be limited by bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other laws relating to or affecting creditors' rights generally and by general equitable principles;

(ii) the execution, delivery and performance of this Manufacturing Agreement have been duly authorized by all necessary action on the part of Kevelt and/or Pharmsynthez, its officers and directors and does not conflict with any agreement, instrument or understanding, oral or written, to which Kevelt and/or Pharmsynthez is a party or by which it may be bound, and, to the best of its knowledge, does not violate any material law or regulation of any court, governmental body or administrative or other agency having authority over it;

(iii) Kevelt and/or Pharmsynthez has full power and authority to perform the obligations set forth herein, and that Kevelt and/or Pharmsynthez is not subject to any order, decree or injunction by a court of competent jurisdiction which may prevent or materially delay the consummation of the transactions contemplated by this Transition and Resupply Agreement;

(iv) Kevelt and/or Pharmsynthez is duly organized, validly existing and in good standing under the laws of the jurisdiction where it is organized; and

- (b) Kevelt and/or Pharmsynthez's Rights (Virexxa). As of the Effective Date, Kevelt and/or Pharmsynthez, jointly and severally, represent and warrant, with respect to manufacture and supply of Virexxa as of the Effective Date, that to its knowledge, upon reasonable inquiry, the granting of the rights to Xenetic hereunder does not conflict with any contractual obligation to any Third Party.
- (c) No Conflicting Agreements. Kevelt and/or Pharmsynthez, jointly and severally, represent and warrant that they have not to their knowledge granted, and during the term of this Transition and Resupply Agreement will not grant, any right to a Third Party that would conflict with the licenses and rights granted to Xenetic hereunder.

Section 6.02 **Representations and Warranties of Xenetic.**

- (a) Authorization. Xenetic represents, warrants and covenants that:

(i) this Transition- and Resupply Agreement has been duly executed and delivered by Xenetic and constitutes a valid and binding obligation of Xenetic, enforceable against Xenetic in accordance with its terms, except as enforceability may be limited by bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other laws relating to or affecting creditors' rights generally and by general equitable principles;

(ii) the execution, delivery and performance of this Transition and Resupply Agreement by Xenetic have been duly authorized by all necessary action on the part of Xenetic, its officers and directors, and does not conflict with any agreement, instrument or understanding, oral or written, to which Xenetic is a party or by which it may be bound, and, to the best of its knowledge, does not violate any material law or regulation of any court, governmental body or administrative or other agency having authority over it;

(iii) Xenetic has full power and authority to perform the obligations set forth herein, and that Xenetic is not subject to any order, decree or injunction by a court of competent jurisdiction which may prevent or materially delay the consummation of the transactions contemplated by this Transition and Resupply Agreement; and

(iv) Xenetic is duly organized, validly existing and in good standing under the laws of the jurisdiction where it is organized.

- (b) No Impairing Agreements. Xenetic represents, warrants and covenants that, during the term of this Transition and Resupply Agreement, it will not knowingly enter into any agreements, oral or written, that would in any way impair its ability to fulfill its obligations under this Transition and Resupply Agreement.

Article VII.

Limitations on Representations and Warranties

Limitations on Representations and Warranties. THE LIMITED WARRANTIES CONTAINED IN ARTICLE 5 ARE THE SOLE WARRANTIES GIVEN BY THE PARTIES HEREUNDER, AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR OTHERWISE, AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES PROVIDED BY COMMON LAW, STATUTE OR OTHERWISE ARE HEREBY DISCLAIMED BY BOTH PARTIES. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR INDIRECT, PUNITIVE, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS AND LOSS OR INTERRUPTION OF BUSINESS. THE FOREGOING PROVISION SHALL NOT BE CONSTRUED TO LIMIT A PARTY'S INDEMNIFICATION OBLIGATION UNDER THIS TRANSITION AND RESUPPLY AGREEMENT FOR THIRD PARTY CLAIMS WHICH MAY INCLUDE CONSEQUENTIAL, PUNITIVE OR OTHER TYPES OF DAMAGES.

Article VIII.
Confidentiality

Section 8.01 **Confidentiality.**

- (a) No Disclosure or Use. During the term of this Transition and Resupply Agreement, and for a period of ten (10) years thereafter, each Party shall keep confidential all information received from the other Party (the “Confidential Information”), and shall not disclose or use such Confidential Information without the other Party’s explicit written consent, except to the extent contemplated by this Transition and Resupply Agreement. This restriction shall not, however, prevent disclosure of such Confidential Information if and to the extent that disclosure is clearly required by law; provided that the disclosing Party informs the other Party without delay of any such requirement, in order to allow such other Party to object to such disclosure and to seek an appropriate protective order or similar protection prior to disclosure.
- (b) No Misappropriation. The Parties agree that the transfer of rights in regulatory documentation by one Party to the other Party pursuant to this Transition and Resupply Agreement shall not, to the actual knowledge of the transferring Party, misappropriate the proprietary or trade secret information of a Third Party.
- (c) Exceptions. The above obligations shall not apply, or shall cease to apply, to Confidential Information of the disclosing Party which:
- (i) is now, or hereafter becomes, through no act or failure to act on the part of the receiving Party, generally known or available;
 - (ii) is known by the receiving Party at the time of receiving such Confidential Information, as evidenced by its written records;
 - (iii) is hereafter furnished to the receiving Party by a Third Party, as a matter of right and without restriction on disclosure;
 - (iv) is independently developed by the receiving Party without resort to the Confidential Information of the disclosing Party or any breach of this Article 7;
 - (v) is entered into evidence in a legal proceeding or submitted for use in a dispute resolution proceeding to enforce one or more rights of a Party under this Transition and Resupply Agreement; provided that the receiving Party shall give the disclosing Party prompt written notice and sufficient opportunity to object to such use or disclosure, or to request confidential treatment of the Confidential Information; or
 - (vi) is the subject of a written permission to disclose provided by the disclosing Party.

Section 8.02 **Permitted Disclosures.**

(a) Each Party may disclose Confidential Information: (i) for the purpose of preparing, filing, prosecuting and maintaining Patents; (ii) for obtaining Regulatory Approvals; (iii) for the manufacture, marketing, distribution or sale of Virexxa; or (iv) to any individuals that are required by law, contract or otherwise not to use or disclose such Confidential Information except as permitted by this Transition and Resupply Agreement. Each Party will use at least the same standard of care as it uses to protect proprietary or confidential information of its own to ensure that such individuals do not disclose or make any unauthorized use of the Confidential Information.

(b) In order to exploit rights retained by or granted to the Parties under this Transition and Resupply Agreement, each Party may publish or publicly present any research or other data which may involve the disclosure of Confidential Information; provided that the publishing Party agrees to furnish the non-publishing Party with copies of any proposed oral, written, graphic or electronic public disclosure prior to submission for publication or presentation. The non-publishing Party shall then have thirty (30) days to review such contemplated publication or presentation. At the end of the thirty (30) day period, the publishing Party may proceed with the contemplated publication or presentation unless (i) the non-publishing Party reasonably requests additional time to fully protect its intellectual property rights, in which case any such contemplated publication or presentation containing the details of a patentable invention must be withheld by the publishing Party for an additional period of thirty (30) days or until a patent application is filed thereon by the non-publishing Party, whichever is earlier in time; or (ii) the non-publishing Party reasonably requests that trade secret information or other Confidential Information of the non-publishing Party be redacted from the contemplated publication or presentation, in which case any such request shall be honored by the publishing Party.

Section 8.03 **Disclosure of Transition and Resupply Agreement.** Except as required by law, neither Kevelt and/or Pharmsynthez nor Xenetic shall release to any Third Party or publish in any way any Confidential Information with respect to the terms of this Transition and Resupply Agreement or concerning their cooperation without the prior written consent of the other Party, which consent will not be unreasonably withheld or delayed; provided; however, that either Party may disclose the terms of this Transition and Resupply Agreement (a) to the extent required to comply with applicable laws, and (b) in any instance where a Party becomes legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process). Notwithstanding any other provision of this Transition and Resupply Agreement, each Party may disclose the terms of this Transition and Resupply Agreement (i) to its legal counsel or (ii) to lenders, investment bankers, attorneys, financial advisors and other financial institutions of its choice solely for purposes of financing the business operations of such Party, or to a potential acquirer of all or substantially all of the assets or equity interests of such Party (a) upon the written consent of the other Party, or (b) if the Party disclosing such terms obtains a signed confidentiality agreement with such intended recipient with respect to such Confidential Information, upon terms substantially similar to those contained in this Article 7.

Section 8.04 **Confidential Information of Each Party.** The Parties agree that the material financial terms of the Transition and Resupply Agreement shall be considered the Confidential Information of both Parties.

Section 8.05 **Employee Obligations.** Each Party shall undertake to ensure that all of its employees who have access to Confidential Information are under obligations of confidentiality to such Party.

Article IX.
Term and Termination

Section 9.01 **Term.**

- (a) Term. The supply of Virexxa by Kevelt and/or Pharmsyntez shall continue until as the earliest of (i) such time as Xenetic requests the transfer of the manufacturing process to itself or a Third Party manufacturer selected by Xenetic pursuant to Article II of this Transition, Services and Resupply Agreement; (ii) such time as Xenetic discontinues the development of a Virexxa clinical or commercial program; (iii) eight (8) years from the Effective Date or (iv) upon Xenetic's written notice to be provided no later than three (3) months prior to the termination date.
- (b) Termination with Cause. Either Party may terminate this Transition and Resupply Agreement for cause pursuant to Sections 9.02 and 9.03.
- (c) Accrued Obligations. Except where explicitly provided elsewhere herein, termination of this Transition and Resupply Agreement for any reason, will not affect: (i) obligations of the Parties, including any payments which have accrued as of the date of termination or expiration, or (ii) rights and obligations of the Parties at law or in equity which, from the context thereof, are intended to survive termination of this Transition and Resupply Agreement; nor prejudice any Party's right to obtain performance of any obligation then due and owing.

Section 9.02 **Termination for Insolvency.** Either Party may terminate this Transition and Resupply Agreement immediately upon delivery of written notice to the other Party: (i) upon the institution by or against the other Party of insolvency, receivership or bankruptcy proceedings or any other proceedings for the settlement of the other Party's debts; provided, however, with respect to involuntary proceedings, that such proceedings are not dismissed within sixty (60) days; (ii) upon the other Party's making an assignment for the benefit of creditors; or (iii) upon the other Party's dissolution or ceasing to do business.

Section 9.03 **Termination for Material Breach.** Either Party may terminate this Transition and Resupply Agreement upon sixty (60) days prior written notice to the other Party upon a material breach by the other Party of any of its obligations under this Transition and Resupply Agreement (and such obligations specifically include a failure by a Party to pay any amount owing under this Transition and Resupply Agreement); provided, however, that such termination shall become effective only if the breaching Party shall fail to: (i) remedy or cure the breach within such sixty (60) day period, or initiate a remedy or cure within such period if it is not practicable to complete the cure in such period; or (ii) within sixty (60) days after the date of the non-breaching Party's written notice of material breach, provide written notice of the breaching Party's dispute of the alleged breach or failure to cure and its invocation of the dispute resolution provisions set forth in the IP Asset Acquisition Agreement. If the non-breaching Party elects not to terminate this Transition and Resupply Agreement pursuant to this Section 9.03, then the non-breaching Party shall be entitled to seek, any equitable remedies and damages permitted by law, except to the extent otherwise limited by this Transition and Resupply Agreement or the Agreement.

Article X.
Product Liability, Indemnification and Insurance

Section 10.01 **Responsibility and Control.** Xenetic and Kevelt and/or Pharmsynthez shall each be solely responsible for the safety of its own employees, agents, Affiliates or independent contractors with respect to its performance under this Transition and Resupply Agreement, and each shall hold the other Party harmless with regard to any liability for damages or personal injuries resulting from acts of its respective employees, agents, Affiliates or independent contractors.

Section 10.02 **Xenetic Right to Indemnification.** Kevelt and/or Pharmsynthez shall defend, indemnify, and hold harmless Xenetic, its Affiliates, successors, and assigns and their respective directors, officers, employees, agents, and independent contractors (collectively the "Xenetic Indemnitees") from and against any and all liabilities, damages, losses, settlements, claims, actions, suits, judgments, interest, penalties, fines, costs, or expenses (including, without limitation reasonable attorneys' fees) (any of the foregoing, "Section 10.02 Damages") incurred or asserted against any Xenetic Indemnitee of whatever kind or nature including, without limitation, any claim or liability based upon negligence, warranty, strict liability, or violation of governmental regulation, or otherwise arising from or occurring as a result of a claim or demand made by a Third Party against any Xenetic Indemnitee (a "Xenetic Third Party Claim") because of (i) the material breach by Kevelt and/or Pharmsynthez, its employees, other agents, independent contractors, sublicensees or Affiliates of their representations, warranties, or obligations under this Transition and Resupply Agreement; (ii) the material violation of any applicable law by Kevelt and/or Pharmsynthez; or, (iii) the negligence or willful misconduct of Kevelt and/or Pharmsynthez, its employees, other agents, independent contractors, sublicensees or Affiliates in connection with this Transition and Resupply Agreement; provided, however, that Kevelt and/or Pharmsynthez shall have no such obligation to defend, indemnify, or hold harmless the Xenetic Indemnitees against a Xenetic Third Party Claim to the extent any Section 10.02 Damages are based upon, or are the result of, or arise from, Xenetic activity and in any event shall not be liable for Section 10.02 Damages in excess of twenty five million Euros (€25,000,000) in the aggregate for all Xenetic Third Party Claims collectively. The indemnification provided under clause (a) of this Section 10.02, shall apply only to Virexxa manufactured by Kevelt and/or Pharmsynthez. The indemnification provided under clauses (i) through (iii) of this Section 10.02, shall be applicable during the term of this Transition and Resupply Agreement.

Section 10.03 **Indemnification Procedures.** Promptly after receipt by a Xenetic Indemnitee of notice of any pending or threatened claim against it (an "Action"), such Xenetic Indemnitee shall give written notice to Kevelt and/or Pharmsynthez to look for indemnification pursuant to this ArticleX (the "Indemnifying Party") of the commencement thereof. The failure to so notify the Indemnifying Party shall not relieve it of any liability that it may have to any Indemnitee hereunder, except to the extent the Indemnifying Party demonstrates that it is prejudiced thereby. In case any Action that is subject to indemnification under Section 10.02 shall be brought against an Xenetic Indemnitee and it shall give written notice to Kevelt and/or Pharmsynthez of the commencement thereof, Kevelt and/or Pharmsynthez shall be entitled to participate therein and, if it so desires, to assume the defense thereof with counsel reasonably satisfactory to such Xenetic Indemnitee and, after notice from Kevelt and/or Pharmsynthez to the Xenetic Indemnitee of its election to assume the defense thereof, Kevelt and/or Pharmsynthez shall not be liable to such Xenetic Indemnitee under this ArticleX for any fees of other counsel or any other expenses, in each case subsequently incurred by such Xenetic Indemnitee in connection with the defense thereof. Notwithstanding Kevelt's and/or Pharmsynthez's election to assume the defense of any such Action that is subject to indemnification under Section 10.02, the Xenetic Indemnitee shall have the right to employ separate counsel and to participate in the defense of such Action at its own expense. If a Kevelt and/or Pharmsynthez assumes the defense of such Action, no compromise or settlement thereof may be effected by Kevelt and/or Pharmsynthez without the Xenetic Indemnitee's written consent, which consent shall not be unreasonably withheld or delayed, unless (i) there is no finding or admission of any violation of law or any violation of the rights of any Third Party and no effect on any other claims that may be made against the Xenetic Indemnitee and (ii) the sole relief provided is monetary damages that are paid in full by Kevelt and/or Pharmsynthez.

Section 10.04 **Compliance.** The Parties shall comply fully with all applicable laws and regulations in connection with their respective activities under this Transition and Resupply Agreement.

Section 10.05 **Kevelt and Pharmsynthez Insurance.**

(a) Kevelt and Pharmsynthez shall, until expiration of the last batch of Virexxa manufactured hereunder, by Kevelt and/or Pharmsynthez, obtain and maintain at their own cost and expense, any combination of insurance, for its commercial liability, including, but not limited to, product liability and contractual liability insurance, with respect to its activities hereunder.

(b) Such insurance or self-insurance shall be in such amounts and subject to such deductibles as the Parties may agree based upon standards prevailing in the industry at the time, but under no circumstances shall be less than: (i) Four Million Dollars (\$4,000,000) per occurrence for damage, injury and/or death to persons prior to regulatory authority approval of Virexxa; (ii) Ten Million Dollars (\$10,000,000) per occurrence for damage, injury and/or death to persons after regulatory authority approval of Virexxa; or One Million Dollars (\$1,000,000) per occurrence for damage/or injury to property. Such insurance shall be written to cover claims incurred, discovered, manifested, or made in connection with clinical development and commercial sale of Virexxa. Upon written request of Xenetic, Kevelt and/or Pharmsynthez shall provide to Xenetic copies of its Certificates of Insurance.

(c) All insurance required of Kevelt and/or Pharmsynthez under this Transition and Resupply Agreement shall, be through a commercially based insurance company, such insurance shall (i) be issued by reputable, financially sound companies; (ii) provide that the insurance company will endeavor to provide at least thirty (30) days' notice of cancellation of coverage, non-renewal or material change of coverage to both Xenetic and Kevelt and/or Pharmsynthez, but its failure to do so shall impose no penalty or additional obligations under this Transition and Resupply Agreement; and (iii) contain a severability of interest or separation of the insureds provision, affording defense and coverage for an insured in the event of a claim brought by another insured.

(d) Additional Requirements. All of the foregoing liability policies shall be primary and non-contributory and contain a waiver of subrogation in favor of the other Party or the other Party's designee.

(e) No Limitation. Nothing in this Article 9 regarding insurance coverage amounts shall be deemed or interpreted as a limitation on the indemnities set forth in this Transition and Resupply Agreement.

Article XI.
Miscellaneous Provisions

Section 11.01 **Governing Law.** This Transition and Resupply Agreement shall be governed, interpreted and construed in accordance with the laws of the United States and the State of Massachusetts, without regard to conflict of laws principles thereof.

Section 11.02 **Waiver.** The failure on the part of Kevelt and/or Pharmsynthez or Xenetic to exercise or enforce any rights conferred upon it hereunder shall not be deemed to be a waiver of any such rights and shall not operate to bar the exercise or enforcement thereof at any time or times thereafter. The observance of any term of this Transition and Resupply Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) by the Party entitled to enforce such term, but any such waiver shall be effective only if set forth in a writing signed by the Party against whom such waiver is to be asserted.

Section 11.03 **Force Majeure.** Neither Party shall be held liable or responsible to the other Party, nor be deemed to have defaulted under or breached this Transition and Resupply Agreement, for failure or delay in fulfilling or performing any term of this Transition and Resupply Agreement, other than an obligation to make a payment, when such failure or delay is caused by or results from fire, floods, earthquakes, embargoes, prohibitions or interventions, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts, acts of God, or any other cause beyond the reasonable control of the affected Party (hereinafter a "Force Majeure"). Nothing in this provision shall be interpreted to restrict either Party from exercising its rights to terminate this Transition and Resupply Agreement pursuant to its terms during such periods of Force Majeure.

Section 11.04 **Severability.** It is the intention of the Parties to comply with all applicable laws, domestic or foreign, in connection with the performance of its obligations hereunder. In the event that any provision of this Transition and Resupply Agreement, or any part hereof, is found invalid or unenforceable, the remainder of this Transition and Resupply Agreement will be binding on the Parties hereto, and will be construed as if the invalid or unenforceable provision or part thereof had been deleted, and this Transition and Resupply Agreement shall be deemed modified to the extent necessary to render the surviving provisions enforceable to the fullest extent permitted by law.

Section 11.05 **Survival.** The following Articles and Sections shall survive termination or expiration of this Transition and Resupply Agreement, with such limitations as are noted: Article 1, to the extent definitions are embodied in the following listed Articles and Sections of this Transition and Resupply Agreement; Articles 4, 7 and 8; Sections 9.01(b); and Articles 10 and 11.

Section 11.06 **Government Acts.** In the event that any act, regulation, directive, or law of a government, including its departments, agencies or courts, (a “Government Act”) should make impossible or prohibit, restrain, modify or limit any material act or obligation of Kevelt and/or Pharmsynthez or Xenetic under this Transition and Resupply Agreement, the Party, not so affected shall have the right, at its option, to suspend or terminate this Transition and Resupply Agreement. Such right of suspension or termination may be exercised as to the country which committed the Government Act only if after thirty (30) days of good faith negotiations between the Parties, the Parties cannot agree to make such modifications to this Transition and Resupply Agreement as may be necessary to fairly address the Government Act.

Section 11.07 **Government Approvals.** Each Party will use commercially reasonable efforts to obtain any government approval required to enable this Transition and Resupply Agreement to become effective, or to enable any payment hereunder to be made, or enable any other obligation hereunder to be observed or performed. Each Party will keep the other Party informed of its progress in obtaining any such governmental approvals.

Section 11.08 **Assignment.** This Transition and Resupply Agreement may not be assigned in part or in whole, or delegated in whole or in part, by either Party without the prior written consent of the other Party; provided, however, that either Party may assign this Transition and Resupply Agreement, without the consent of the other Party, (a) in part or in whole to any of its Affiliates, if the assigning Party remains liable for the full performance of its Affiliates’ obligations hereunder, or (b) in connection with the transfer or sale of all or substantially all of its assets or business to which this Transfer and Supply Agreement relates, or in the event of its merger or consolidation with, acquisition by, or sale to another company. The Parties acknowledge that Xenetic may elect to assign to one or more Third Parties, on a country-by-country or region-by-region basis, certain of its rights and to delegate certain of its obligations under this Transition and Resupply Agreement; provided, however, that Xenetic may not assign such rights or delegate such obligations in the United States, Europe or Japan to a Third Party without Kevelt’s and/or Pharmsynthez’s prior written consent.

Section 11.09 **Binding Agreement.** This Transition and Resupply Agreement shall be binding upon and inure to the benefit of all successors and permitted assigns of the Parties.

Section 11.10 **Counterparts.** This Transition and Resupply Agreement may be executed by original or facsimile signature in several counterparts, all of which shall be deemed to be originals, and all of which shall constitute one and the same Transition and Resupply Agreement.

Section 11.11 **No Agency.** Nothing herein contained shall be deemed to create an agency, joint venture, amalgamation, partnership or similar relationship between Kevelt and/or Pharmsynthez and Xenetic. Notwithstanding any of the provisions of this Transition and Resupply Agreement, neither Party shall at any time enter into, incur, or hold itself out to Third Parties as having authority to enter into or incur, on behalf of the other Party, any commitment, expense, or liability whatsoever, and all such commitments, expenses and liabilities undertaken or incurred by one Party in connection with or relating to the development, manufacture or sale of Virexxa shall be undertaken, incurred or paid exclusively by that Party, and not as an agent or representative of the other Party.

Section 11.12 **Notice.** All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by facsimile or e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient or (d) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section 10.13):

If to Kevelt and/or Pharmsynthez:

AS KEVELT
3/1, Teaduspargi Str.,
12618 Tallinn, Estonia
Facsimile: +372 670 1219
E-mail: a.ahtloo@kevelt.ee
Attention: Allan Ahtloo

OJSC Pharmsynthez
188663 Leningradskaya oblast, Vsevolozhsky
rayon, urban village Kuzmolovsky, station
Capitolovo, № 134 liter 1, Russian Federation
Facsimile: 7 (812) 329-8089
E-mail: pkruglyakov@pharmsynthez.com
Attention: Petr Kruglyakov, CEO

with a copy to:

Covington & Burling LLP
The New York Times Building
620 Eighth Avenue
New York, New York 10018
Facsimile: (646) 441-9113
Email: mgehl@cov.com
Attention: Matthew Gehl

If to Xenetic:

Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Mass. 02421
Facsimile: [FAX NUMBER]
E-mail: s.maguire@xeneticbio.com
Attention: Scott Maguire, CEO

with a copy to:

Taft, Stettinius & Hollister LLP
111 E. Wacker Drive, Suite 2800
Chicago, IL 60601
Facsimile: 312-275-7569
E-mail: mgoldsmith@taftlaw.com
Attention: Mitchell D. Goldsmith, Esq.

Section 11.13 **Headings.** The Article, Section and subsection headings are for convenience only and will not be deemed to affect in any way the language of the provisions to which they refer.

Section 11.14 **Authority.** The undersigned represent that they are authorized to sign this Transition and Resupply Agreement on behalf of the Parties hereto.

Section 11.15 **No Implied Licenses.** Nothing in this Transition and Resupply Agreement shall be construed as granting either Party by implication, estoppel or otherwise, any license rights.

Section 11.16 **Entire Agreement.** This Transition and Resupply Agreement contains the entire understanding of the Parties relating to the matters referred to herein, and may only be amended by a written document, duly executed on behalf of the respective Parties. ,
Services

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first written above by their respective officers thereunto duly authorized.

SELLER:

AS KEVELT

By _____
Name: Allan Ahtloo
Title:

PARENT:

OJSC PHARMSYNTHEZ

By _____
Name: Peter V. Kruglyakov
Title:

BUYER:

XENETIC BIOSCIENCES, INC.

By _____
Name:
Title:



Xenetic Biosciences, Inc. Enters into Asset Purchase Agreement with Financing Component for the Rights to Develop, Market and License Oncologic Drug Candidate Virexxa™

LEXINGTON, Mass., November 16, 2015 (GLOBE NEWSWIRE) – **Xenetic Biosciences, Inc. (OTCQB: XBIO)** (the “Company”), a biopharmaceutical company focused on developing next-generation biologic drugs and novel oncology therapeutics, announces that it has entered into an Asset Purchase Agreement (the “APA”) with AS Kevelt, an Estonian biotech company (“Kevelt”) and OJSC Pharmsynthez (“Pharmsynthez”, and together with Kevelt, “Sellers”). Pursuant to the APA, the Sellers will transfer to the Company certain intellectual property rights with respect to Virexxa™, and the Company will receive the worldwide rights to develop, market and license Virexxa for all uses, except for certain excluded uses within the Commonwealth of Independent States (the “CIS”), in exchange for 111.5 million shares of Company common stock and certain other consideration. Virexxa™ is a Phase II oncology drug candidate which is under investigation for the treatment of certain endometrial cancers. As part of this total consideration, the Company will also acquire Kevelt's U.S. Orphan Drug designation for the use of Virexxa™ in the treatment of progesterone receptor negative endometrial cancer in conjunction with progesterone therapy.

The APA also contains a financing component wherein the Company will receive from Pharmsynthez up to \$3.5 million in bridge financing and a commitment of an additional \$6.5 million in financing as part of a planned capital raise of at least \$15 million and up-list to a national securities exchange.

“This transaction provides us with our first U.S. FDA IND-enabled clinical candidate for an orphan cancer indication,” said M. Scott Maguire, Chief Executive Officer of Xenetic Biosciences. “Virexxa with orphan designation in the U.S. adds to our Phase II portfolio which also includes ErepoXen, our long-acting anemia drug candidate. As well as expanding our pipeline, the Company is pleased to receive financial commitments of up to \$10M to fund our further development, as well as financial commitments to back our planned uplisting to a national securities exchange, an objective that remains a priority for the Company’s board.”

This press release is not intended to describe this transaction in its entirety and the reader should refer to SEC form 8-K and related exhibits filed on November 16, 2015 for a complete description of this APA transaction.

About Virexxa™

Virexxa™ (sodium cridanimod) is a small-molecule immunomodulator and interferon inducer which, in preliminary studies, has been shown to increase progesterone receptor (PrR) expression in endometrial tissue. Restoration of PrR expression may re-sensitize endometrial tumor tissue to progestin therapy in previously unresponsive tumors.

Virexxa™ is under investigation in a U.S. FDA IND-enabled Phase 2 open-label, multi-center, single arm study of sodium cridanimod in progesterone receptor negative recurrent or persistent endometrial carcinoma. This study will investigate the effect of sodium cridanimod on the levels of PrR in tumor tissue and how this effect correlates to a patient’s clinical response to progestin therapy.

Endometrial cancer is the most common gynaecological malignancy and represents a major health concern, as overall five-year survival rates have not improved over the past three decades. Endometrial cancer patients whose tumors no longer express progesterone receptors are not candidates for progestin-based therapy. Virexxa™ may improve sensitivity to progestin therapy in subjects with advanced or recurrent PrR -negative tumors.

For more information:
clinicaltrials.gov/show/NCT02064725

About Xenetic Biosciences

Xenetic Biosciences, Inc. is a biopharmaceutical company developing next-generation biologic drugs and novel oncology therapeutics. Xenetic’s proprietary drug technology platforms include PolyXen™, designed to develop next generation biologic drugs by extending the efficacy, safety and half-life of biologic drugs, and OncoHist™ for the development of novel oncology drugs focused on orphan indications.

Xenetic's lead product candidates include ErepoXen™, a polysialylated form of erythropoietin (EPO) for the treatment of anemia in pre-dialysis patients with chronic kidney disease, and OncoHist™, a novel recombinant human histone H1.3 molecule for the treatment of refractory Acute Myeloid Leukemia (AML) with potential to treat numerous other cancer indications. Xenetic is collaborating with Russian-based OJSC Pharmsynthez (who is an affiliate of a significant shareholder in Xenetic) and the Serum Institute of India to test additional drug candidates and to de-risk the development process with clinical data generated in Russia and India before Xenetic takes these candidates into the clinic in the Western markets.

Xenetic is also developing a broad pipeline of clinical candidates for next generation biologics and novel oncology therapeutics in a number of orphan disease indications. For more information, please visit the company's website at www.xeneticbio.com and connect on Twitter, LinkedIn, Facebook and Google+.

Xenetic is working together with Baxalta Incorporated (formerly Baxter Healthcare) to develop a novel series of polysialylated blood coagulation factors, including a next generation Factor VIII. This collaboration relies on Xenetic's PolyXen™ technology to conjugate PSA to therapeutic blood-clotting factors, with the goal of improving the pharmacokinetic profile and extending the active life of these biologic molecules. Baxalta is one of the Company's largest shareholders having invested in a number of rounds with the most recent investment of \$10M last year. The agreement is an exclusive research, development and license agreement which grants Baxalta a worldwide, exclusive, royalty-bearing license to Xenetic's PSA patented and proprietary technology in combination with Baxalta's proprietary molecules designed for the treatment of blood and bleeding disorders. Under the agreement, Xenetic may receive regulatory and sales target payments for total potential milestone receipts of up to \$100 million plus royalties on sales.

Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including but not limited to, the potential safety, tolerability and efficacy of our product candidates and the advancement of our clinical trials. Forward-looking statements can be identified by terminology such as "anticipate," "believe," "could," "could increase the likelihood," "estimate," "expect," "intend," "is planned," "may," "should," "will," "will enable," "would be expected," "designed to," "look forward," "may provide," "would" or similar terms, variations of such terms or the negative of those terms. Any forward-looking statements in this press release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk of cessation or delay of any of the ongoing or planned clinical trials and/or our development of our product candidates, the risk that the results of previously conducted studies involving similar product candidates will not be repeated or observed in ongoing or future studies involving current product candidates, the risk that our collaboration with Baxter will not continue or will not be successful, and the risk that any one or more of our product candidates will not be successfully developed and commercialized. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our Annual Report on Form 10-K, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and Xenetic undertakes no duty to update this information unless required by law.

Contact:

Xenetic Biosciences Inc.
www.xeneticbio.com
M. Scott Maguire, Chief Executive Officer
781 778 7720
j.mccusker@xeneticbio.com

UK/European contact:

Arlington Group Asset Management Limited
Ross Ainger
+44 (0)207 389 5012
rainger@agam.co.uk

Brokers and Analysts:

Chesapeake Group
+1-410-825-3930
info@chesapeakegp.com

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