

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

FORM 8-K/A
(Amendment No. 2)

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

Date of Report (Date of earliest event reported): **May 20, 2019** (March 1, 2019)

Xenetic Biosciences, Inc.
(Exact name of registrant as specified in charter)

Nevada
(State or other jurisdiction of incorporation)

001-37937
(Commission File Number)

45-2952962
(IRS Employer Identification No.)

40 Speen Street, Suite 102
Framingham, Massachusetts
(Address of principal executive offices)

01701
(Zip Code)

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

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

Check the appropriate box below if the Form 8-K 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	XBIO	The NASDAQ Stock Market LLC

Explanatory Note

This Current Report on Form 8-K/A (Amendment No. 2) amends the Current Report on Form 8-K filed with the Securities and Exchange Commission (the “SEC”) by Xenetic Biosciences, Inc. (the “Company”) on March 4, 2019 (the “Original 8-K”), as amended on Form 8-K/A on May 13, 2019 (the “Amendment No. 1 to Form 8-K”) announcing, among other things, the signing of an agreement to acquire the novel CAR T (“Chimeric Antigen Receptor T Cell”) platform technology, called “XCART,” a proximity-based screening platform capable of identifying CAR constructs that can target patient-specific tumor neoantigens, with a demonstrated proof of mechanism in B-cell Non-Hodgkin lymphomas.

This Amendment No. 2 is being filed solely for the purpose of incorporating by reference Exhibit 2.1 from the Original Form 8-K and noting that certain portions of Exhibit 2.1 have been omitted pursuant to a confidential treatment request and such omitted information has been filed separately with the SEC. The Company erroneously indicated in Amendment No. 1 to Form 8-K that it was withdrawing its confidential treatment request pertaining to Exhibit 2.1.

Except as specifically provided otherwise herein, this Amendment No. 2 does not reflect events occurring after the date of the filing of the Company's Original 8-K, or modify or update those disclosures that may have been affected by subsequent events. Accordingly, this Amendment No. 2 should be read in conjunction with the Original 8-K.

ADDITIONAL INFORMATION AND WHERE TO FIND IT

In connection with the Transaction, the Company has filed with the Securities and Exchange Commission (the “SEC”), a registration statement on Form S-4 that includes a combined preliminary proxy statement/prospectus. This communication is not a substitute for any proxy statement, registration statement, proxy statement/prospectus or other documents the Company may file with the SEC in connection with the Transaction. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ CAREFULLY AND IN THEIR ENTIRETY THESE DOCUMENTS, ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, AND OTHER DOCUMENTS FILED BY THE COMPANY WITH THE SEC IN CONNECTION WITH THE TRANSACTION, BECAUSE THESE DOCUMENTS CONTAIN IMPORTANT INFORMATION. Investors and security holders will be able to obtain free copies of these materials and other documents filed with the SEC by the Company through the website maintained by the SEC at www.sec.gov. Investors and security holders may also obtain free copies of the documents filed by the Company with the SEC by directing a written request to Xenetic Biosciences, Inc., 40 Speen Street, Suite 102, Framingham, MA 01701 or by calling 781-778-7720.

PARTICIPANTS IN THE SOLICITATION

This communication is not a solicitation of a proxy from any investor or security holder. The Company, its respective directors, executive officers and other members of its management and employees may be deemed to be participants in the solicitation of proxies from shareholders of the Company in connection with the Transaction. Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of proxies in connection with the Transaction, including a description of their direct or indirect interests, by security holdings or otherwise, will be set forth in the relevant materials when filed with the SEC. Information regarding the directors and executive officers of the Company is contained in its proxy statement for its 2018 annual meeting of stockholders, filed with the SEC on November 13, 2018, its Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on March 29, 2019, as amended on April 30, 2019, and its Registration Statement on Form S-4, including a proxy statement/prospectus, which was filed on March 29, 2019. These documents can be obtained free of charge from the sources indicated above.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
2.1	Share Purchase Agreement (incorporated by reference to Exhibit 2.1 in the Company's Current Report on Form 8-K, filed on March 4, 2019) ^{††}
10.1	OPKO Assignment Agreement . ^{††}
10.2	Voting Agreement – Pharmsynthez (incorporated by reference to Exhibit 10.2 in the Company's Current Report on Form 8-K, filed on March 4, 2019).
10.3	Voting Agreement – OPKO (incorporated by reference to Exhibit 10.3 in the Company's Current Report on Form 8-K, filed on March 4, 2019).
10.4	Voting Agreement – Dr. Genkin (incorporated by reference to Exhibit 10.4 in the Company's Current Report on Form 8-K, filed on March 4, 2019).
99.1	Press release dated March 4, 2019 (incorporated by reference to Exhibit 99.1 in the Company's Current Report on Form 8-K, filed on March 4, 2019).
99.2	Corporate Presentation (incorporated by reference to Exhibit 99.2 in the Company's Current Report on Form 8-K, filed on March 4, 2019).

* Schedules and similar attachments to the Share Purchase Agreement, dated as of March 1, 2019, have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish on a supplemental basis a copy of any omitted schedules and similar attachments to the Securities and Exchange Commission upon request.

† Certain portions of the exhibit have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the SEC.

†† Portions of this exhibit have been omitted pursuant to Rule 601(b)(10) of Regulation S-K.

SIGNATURES

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

XENETIC BIOSCIENCES, INC.

Date: May 20, 2019

By: /s/ James Parslow
Name: James Parslow
Title: Chief Financial Officer

ASSIGNMENT AGREEMENT

between

XENETIC BIOSCIENCES, INC.,

and

OPKO PHARMACEUTICALS, LLC

dated as of

March 1, 2019

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THE SYMBOL “[****]” DENOTES PLACES WHERE CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT IS BOTH (i) NOT MATERIAL, AND (ii) WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED

ASSIGNMENT AGREEMENT

This ASSIGNMENT AGREEMENT (this “**Agreement**”), dated as of March 1, 2019, is entered into between Xenetic Biosciences, Inc., a Nevada corporation (“**Buyer**” or “**Assignee**”), and OPKO Pharmaceuticals, LLC, a limited liability corporation organized under the laws of the state of Delaware, located at 4400 Biscayne Boulevard, Miami, FL 33137, USA (“**Opko**” or “**Assignor**” or “**Company**”). Assignor and Assignee are sometimes referred to herein collectively as the “**Parties**” and each individually as a “**Party**.” Capitalized terms used herein but not otherwise defined, shall have the meaning set forth in **Article I**.

RECITALS

WHEREAS, a certain Intellectual Property License Agreement dated as of or approximately the date hereof (the “**IP License Agreement**”) was entered into by The Scripps Research Institute, a California public benefit corporation located at 10550 North Torrey Pines Road, La Jolla, CA 92037, USA (“**Scripps**”) and Opko regarding certain of the Company Patents;

WHEREAS, Opko wishes to assign its rights and obligations under the IP License Agreement and the Buyer wishes to acquire the IP License Agreement;

WHEREAS, simultaneously with this transaction, the Buyer and Hesperix SA, a Swiss corporation (“**Hesperix**”), and certain other parties are entering into a Share Purchase Agreement, dated as of the date hereof (the “**Share Purchase Agreement**”);

WHEREAS, as a condition and an inducement to Buyer’s willingness to enter into this Agreement, Opko has entered into that certain Voting Agreement with Buyer, of even date herewith, pursuant to which, among other things, Opko has agreed to vote its ownership in Buyer in favor of the transactions contemplated hereby at the Buyer’s Stockholders’ Meeting (as defined herein) (the “**Voting Agreement**”);

WHEREAS, the assignment of the IP License Agreement in exchange for Transaction Shares (as defined herein) will be a taxable transaction for United States federal tax purposes; and

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**:

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

“**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.

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

“**Approval**” means any approval, authorization, clearance, consent, qualification or registration, or any waiver of any of the foregoing, required to be obtained from, or any notice, statement or other communication required to be filed with or delivered to, any Governmental Authority or any other Person.

“**Basket**” has the meaning set forth in **Section 7.04(a)**.

“**Books and Records**” means all books and records of the Company with respect to the IP License Agreement and the Licensed Intellectual Property, including files, manuals, price lists, customer lists, sales and promotional materials, documents evidencing intangible rights or obligations, accounting records and litigation files (regardless of the media in which stored).

“**Blue Sky Laws**” has the meaning set forth in **Section 5.12**.

“**Business Day**” means any day except Saturday, Sunday or any other day on which commercial banks located in New York, New York are authorized or required by Law to be closed for business.

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

“**Buyer Board**” has the meaning set forth in **Section 5.05(a)**.

“**Buyer Common Stock**” means the common stock of Buyer.

“**Buyer Financing**” has the meaning set forth in **Section 6.02(e)**.

“**Buyer Indemnitees**” has the meaning set forth in **Section 7.02**.

“**Cap**” has the meaning set forth in **Section 7.04(a)**.

“**Certificate of Domestication**” has the meaning set forth in **Section 5.05(d)**.

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

“**Closing Date**” has the meaning set forth in **Section 2.04**.

“**Closing Price**” means the volume weighted average closing trading price of the Buyer Common Stock, as reported by the Nasdaq, for the ten (10) consecutive trading days ending on the trading day immediately prior to the date of final resolution of any indemnification claim against Company hereunder.

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

“**Company**” has the meaning set forth in the recitals.

“**Company Indemnitees**” has the meaning set forth in Section 7.03.

“**Company Patents**” means the patent applications listed in Exhibit A of the IP License Agreement and all of the rights appurtenant thereto including all foreign counterparts thereof and all priority applications thereof.

“**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.

“**Definitive Proxy Statement**” has the meaning set forth in **Section 5.05(a)**.

“**Direct Claim**” has the meaning set forth in **Section 7.05(b)**.

“**Disclosure Schedules**” means the Disclosure Schedules delivered by Company or Buyer concurrently with the execution and delivery of this Agreement.

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

“**Domestication**” means the domestication of Buyer as a corporation pursuant to Section 388 of the Delaware General Corporation Law, as amended, and under the Laws of Nevada, whereby Buyer shall continue its existence in the State of Delaware.

“**Encumbrance**” means any charge, claim, community property interest, pledge, condition, equitable interest, lien (statutory or other), option, 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.

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

“**FDA**” means the United States Food and Drug Administration, or any successor entity thereto.

“**Fundamental Representations**” has the meaning set forth in **Section 7.01**.

“**GAAP**” means generally accepted accounting principles of the United States of America consistently applied, as in effect from time to time.

“**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.

“**Indemnification Exclusions**” has the meaning set forth in **Section 7.04(c)**.

“**Indemnified Party**” has the meaning set forth in **Section 7.05**.

“**Indemnifying Party**” has the meaning set forth in **Section 7.05**.

“**Knowledge**” means the actual knowledge of the Company’s Chief Patent Counsel and its executive officers.

“**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.

“**Licensed Intellectual Property**” has the meaning set forth in **Section 3.03**.

“**Lock-Up Agreement**” means that certain Lock-Up Agreement to be executed by each of Opko and Scripps, in the form attached hereto as **Exhibit A** (which shall restrict such recipient’s sale or transfer of any Transaction Shares ultimately received by such recipient as provided therein and as otherwise required by Law).

“**Losses**” means 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.

“**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 (a) IP License Agreement, or (b) the ability of Company to consummate the transactions contemplated hereby on a timely basis; *provided, however*, that “Material Adverse Effect” shall not include any event, occurrence, fact, condition or change, directly or indirectly, arising out of or attributable to: (i) general economic or political conditions; (ii) conditions generally affecting the industries in which the Company operates; (iii) any changes in financial or securities markets in general; (iv) act of war (whether or not declared), armed hostilities or terrorism, or the escalation or worsening thereof; or (v) any changes in applicable Laws or accounting rules; *provided further, however*, that any event, occurrence, fact, condition or change referred to in clauses (i) through (v) immediately above shall be taken into account in determining whether a Material Adverse Effect has occurred or could reasonably be expected to occur to the extent that such event, occurrence, fact, condition or change has a disproportionate effect on the Company compared to other participants in the industries in which the Company conducts its businesses.

“**Nasdaq**” means the Nasdaq Stock Market.

“**New Buyer Bylaws**” has the meaning set forth in **Section 5.05(d)**.

“**New Buyer Charter**” has the meaning set forth in **Section 5.05(d)**.

“**Non-Fundamental Survival Period**” has the meaning set forth in **Section 7.01**.

“**NRS**” has the meaning set forth in **Section 4.02**.

“**Organizational Documents**” means (a) in the case of a Person that is a corporation, its articles or certificate of incorporation and its by-laws, regulations or similar governing instruments required by the laws of its jurisdiction of formation or organization; (b) in the case of a Person that is a partnership, its articles or certificate of partnership, formation or association, and its partnership agreement (in each case, limited, limited liability, general or otherwise); (c) in the case of a Person that is a limited liability company, its articles or certificate of formation or organization, and its limited liability company agreement or operating agreement; and (d) in the case of a Person that is none of a corporation, partnership (limited, limited liability, general or otherwise), limited liability company or natural person, its governing instruments as required or contemplated by the laws of its jurisdiction of organization.

“**Party or Parties**” has the meaning set forth in the preamble.

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

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

“**Preliminary Proxy Statement**” has the meaning set forth in **Section 5.05(a)**.

“**Proxy Statement**” has the meaning set forth in **Section 5.05(a)**.

“**Purchase Price**” has the meaning set forth in **Section 2.02**.

“**Regulatory Authorities**” means the FDA or any other applicable Governmental Authority responsible for the oversight and approval of the research, development, manufacturing, distribution, or commercialization of drug, biologic, or medical device products.

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

“**Scripps**” has the meaning set forth in the recitals.

“**SEC**” means the Securities and Exchange Commission.

“**SEC Reports**” means, collectively, all reports, schedules, forms, statements and other documents required to be filed by Buyer under the Securities Act and the Exchange Act, including the exhibits thereto and documents incorporated by reference therein.

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

“**Software**” means any and all computer software and code, whether in source code, object code, or executable code format, including systems software, application software (including mobile apps), firmware, middleware, programming tools, scripts, routines, interfaces, libraries, and databases.

“**Stockholder Approval**” has the meaning set forth in **Section 5.05(a)**.

“**Stockholders’ Meeting**” has the meaning set forth in **Section 5.05(a)**.

“**Subsidiary**” of any Person means (i) a corporation of which such Person owns or controls such number of the voting securities which is sufficient to elect at least a majority of its Board of Directors or (ii) a partnership or limited liability company of which such Person (either alone or through or together with any other Subsidiary) is a partner or member.

“**Tax**” or “**Taxes**” means any and all taxes (whether federal, state, local or foreign), including, without limitation, income, gross receipts, profits, sales, use, occupation, value added, transfer, franchise, withholding, payroll, employment, excise, real property, personal property, environmental (including taxes under Section 59A of the Code), customs duties, license, severance, stamp, premium, windfall profits, capital stock, social security (or similar), unemployment, disability, alternative or add-on minimum and estimated taxes, together with any interest, penalties or additions to tax imposed with respect thereto.

“**Territory**” means worldwide.

“**Third Party Claim**” has the meaning set forth in **Section 7.05(a)**.

“**Transaction Documents**” means this Agreement, the Lock-Up Agreement, Confirmatory Assignment, and any other agreements or documents to be executed hereunder.

“**Transaction Filings**” has the meaning set forth in **Section 5.06**.

“**Transaction Shares**” has the meaning set forth in **Section 2.02**.

“**Voting Agreement**” has the meaning set forth in the recitals.

“**Xenetic Stockholder**” mean any holder of Buyer Common Stock.

ARTICLE II

Assignment; Consideration; closing; tax treatment

Section 2.01 Assignment. Subject to the terms and conditions set forth herein, at the Closing, Company shall convey, transfer, assign, and deliver to Buyer, and Buyer shall acquire and accept, all of Company's right, title and interest in and to the IP License Agreement, and Buyer agrees to assume, perform and discharge all of the obligations and liabilities of Assignor under the IP License Agreement, for the consideration specified in **Section 2.02**. The IP License Agreement is attached hereto as Exhibit B and by this reference is made a part hereof and incorporated herein. The Parties will execute a Confirmatory Assignment substantially in the form of Exhibit C attached hereto for recordation purposes.

Section 2.02 Consideration. As consideration for the transactions contemplated herein, Buyer shall pay Two Million Six Hundred Twenty Five Thousand (2,625,000) shares of Buyer Common Stock (the “**Purchase Price**,” and such shares of Buyer Common Stock, the “**Transaction Shares**”), regardless of the trading price per share of the Transaction Shares at the time of Closing, One Million Nine Hundred Sixty Eight Thousand Seven Hundred and Fifty (1,968,750) of which shall be issued to Company, and Six Hundred Fifty Six Thousand Two Hundred Fifty (656,250) of which Company designates Buyer to issue directly to Scripps.

Section 2.03 Transactions to be Effected at the Closing

(a) At the Closing, Buyer shall deliver to Company:

- (i) certificates representing the portion of the Transaction Shares to be issued to Company as set forth in **Section 2.02**;
- (ii) the portion of the Transaction Shares to be issued to Scripps as set forth in **Section 2.02**;
- (iii) all other agreements, documents, instruments or certificates required to be delivered by Buyer at or prior to the Closing pursuant to **Section 6.03** of this Agreement.

(b) At the Closing, Company shall deliver or shall cause to be delivered to Buyer:

- (i) the Lock-Up Agreement, duly executed by Company and Scripps;
- (ii) [Reserved]
- (iii) a Confirmatory Assignment substantially in the form of Exhibit C attached hereto; and
- (iv) all other agreements, documents, instruments or certificates required to be delivered by Company at or prior to the Closing pursuant to **Section 6.02** of this Agreement.

Section 2.04 Closing. Subject to the terms and conditions of this Agreement, the assignment of the IP License Agreement to the Assignee and issuance of the Transaction Shares from the Assignee to Company and Scripps contemplated hereby shall take place at a closing (the “**Closing**”) to be held at 9:00 a.m., New York time, no later than two (2) Business Days after the last of the conditions to Closing set forth in **Article VI** have been satisfied or waived (other than conditions which, by their nature, are to be satisfied on the Closing Date), at the offices of Akerman LLP, 98 Southeast 7th Street, Suite 1100, Miami, Florida 33131, or at such other time or on such other date or at such other place as the Company and Buyer may mutually agree upon in writing (the day on which the Closing takes place being the “**Closing Date**”).

Section 2.05 Tax Treatment. The assignment of the IP License Agreement by the Buyer in exchange for the Transaction Shares will be a taxable transaction for United States federal income tax purposes.

Section 2.06 Withholding Tax. Buyer, the Company and its Subsidiaries shall be entitled to deduct and withhold from the Purchase Price all Taxes that Buyer and the Company may be required to deduct and withhold under any provision of Tax Law. All such withheld amounts shall be promptly remitted to the relevant Governmental Authority and, accordingly, shall be treated as delivered to Company hereunder and Buyer shall promptly provide Company with written notice of its intent to deduct and withhold, and Buyer shall reasonably cooperate with Company to eliminate or reduce the basis for such deduction or withholding (including by providing Company with a reasonable opportunity to provide forms or other evidence that would exempt such amounts from withholding). Buyer shall promptly provide Company with any applicable receipts for payments remitted to a Governmental Authority pursuant to this Section 2.06.

ARTICLE III
Representations and Warranties of Opko

Except as set forth herein, Opko represents and warrants to Buyer that the statements contained in this **Article III** are true and correct as of the date hereof.

Section 3.01 Organization and Authority of the Company. Company has all requisite power and authority to execute and deliver this Agreement and each other Transaction Document to which it is a party, and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance by Company of each of the Transaction Documents to which it is a party has been duly authorized by all necessary action on the part of Company. This Agreement and the other Transaction Documents have been duly and validly executed and delivered by Company and constitute legal, valid and binding obligations of Company, enforceable against Opko and in accordance with their respective terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium and similar Laws affecting creditors' rights and remedies generally and subject, as to enforceability, to general principles of equity (regardless of whether enforcement is sought in a proceeding at Law or in equity).

Section 3.02 Conflicts; Approvals of Third Parties. The execution, delivery and performance by Company and the other Transaction Documents to which it is a party, the consummation of the transactions contemplated hereby or thereby, and compliance by Company with the provisions hereof or thereof will not: (a) conflict with, violate, result in the breach or termination of, constitute a default under, result in an acceleration of, constitute a change of control under, or create in any party the right to accelerate, terminate, modify or cancel, any contract to which Company is a party or by which Company or its properties, assets are subject, or require an Approval from any Person in order to avoid any such conflict, violation, breach, termination, default or acceleration; (b) violate any Law or any Governmental Order; or (c) result in the creation of any Encumbrance upon the IP License Agreement or the Licensed Intellectual Property, except for any events which shall not result in a Material Adverse Effect. No Approval, Governmental Order, waiver, declaration or filing with, or notification to any Person, including any Governmental Authority, is required on the part of the Company in connection with the execution, delivery and performance of this Agreement or the other Transaction Documents, or the compliance by Company with any of the provisions hereof or thereof.

Section 3.03 Intellectual Property.

(a) To the Knowledge of the Company, Scripps owns, free and clear from all Encumbrances, the Company Patents; the Company possesses legally enforceable rights pursuant to a valid and enforceable written license, sublicense, agreement, or permission to use the intellectual property licensed by Company ("**Licensed Intellectual Property**") through the IP License Agreement; Company is the valid licensee of all Licensed Intellectual Property, free and clear of any and all Encumbrances and the Licensed Intellectual Property licensed by Company immediately prior to the Closing will be licensed or available for use by Buyer on identical terms and conditions immediately subsequent to the Closing hereunder, free and clear of any Encumbrances other than obligations as set forth in the IP License Agreement; neither the execution, delivery, or performance of this Agreement, nor the consummation of the transactions contemplated hereunder, will result in the loss or impairment of or payment of any additional amounts other than as provided for in the IP License Agreement, with respect to, or require the consent of any other Person in respect of, the right to own or use any Licensed Intellectual Property. Other than the IP License Agreement, there are no other royalty or licensing agreements relating to the Company or any other party with respect to the Licensed Intellectual Property or other arrangements or amounts owed to any parties with respect or relating thereto, whether conditioned on the achievement of milestones, passage of time or otherwise; and no amounts are owed under the IP License Agreement other than as provided therein.

(b) Including (i) the importing of product into the United States, (ii) selling or using in the United States, a product made by a patented process, or (iii) such use of Licensed Intellectual Property which to the Knowledge of the Company constitutes unfair competition or trade practice under the Laws of any jurisdiction, to the Knowledge of the Company, the use of the Licensed Intellectual Property has not and will not infringe upon or misappropriate any valid and enforceable intellectual property rights of third parties. The Company has never received any written charge, complaint, claim, demand, or notice alleging any such infringement or misappropriation with respect to the Licensed Intellectual Property (including any written claim that the Company must license or refrain from using any intellectual property rights of any third party). The Company is not a party to any past, nor is there any pending or, to Company's Knowledge, written threat, action, lawsuit, or other judicial, arbitral or administrative proceeding involving any Licensed Intellectual Property, including, without limitation, involving any claim that Company infringed, misappropriated or violated the intellectual property rights of any third party.

(c) The Company has taken steps to protect and preserve the confidentiality of all confidential Licensed Intellectual Property.

(d) To the Company's Knowledge, the Company has complied with and is presently in compliance in all material respects, with all foreign, federal, state, local, governmental (including, but not limited to, the Federal Trade Commission and State Attorneys General), administrative, or regulatory Laws applicable to any Licensed Intellectual Property, and the Company shall take all steps necessary to ensure such compliance until Closing.

(e) To the Company's Knowledge, there are no licenses, settlement agreements, covenants not to sue or other agreements in which the Company or any Company predecessor has granted any rights or interest in or to, or permitted use of, any material Licensed Intellectual Property by any third party or affiliate.

(f) To the Company's Knowledge, the Licensed Intellectual Property is valid and enforceable and in full force; the Licensed Intellectual Property: (i) is not subject to any opposition, cancellation, interference, reissue, reexamination, derivation, revocation or post-grant proceeding and, to the Knowledge of the Company, no such proceeding is or has been threatened in writing; (ii) has not expired, lapsed, or become expressly abandoned (iii) are validly applied for; and (iv) are not the subject of any judicial, administrative or arbitral order, award, decree, injunction, lawsuit, proceeding or stipulation, or of any other proceeding or action pending before any Governmental Authority anywhere in the world other than those in the ordinary course of patent prosecution; all required filings and fees related to the Licensed Intellectual Property applications have been timely submitted with and paid to the relevant Governmental Authorities; and all maintenance fees and annuities required with respect to such Licensed Intellectual Property to date have been timely paid in full.

(g) To the Company's Knowledge: the Company and all prior and current owners of any Licensed Intellectual Property have (A) complied with the duty of candor and disclosure to the United States Patent and Trademark Office and analogous Laws outside the United States with respect to Licensed Intellectual Property; (B) not knowingly misrepresented or failed to disclose any fact or circumstance (including, with respect to Company Patents, the name of any inventor of subject matter claimed in any Company Patent) in connection with the prosecution of any Licensed Intellectual Property; and (C) not otherwise knowingly engaged in any conduct, or failed to perform any act, the result of which could reasonably be expected to adversely affect the validity, enforceability, or ownership of any Licensed Intellectual Property.

(h) To the Company's Knowledge: no fact or circumstance exists that could reasonably be expected to otherwise adversely affect the ownership of any Licensed Intellectual Property.

(i) The Company has not sent any notice to or asserted or threatened any action or claim against any third party involving or relating to the Licensed Intellectual Property and, to the Company's Knowledge, at no time has any Person infringed or misappropriated any Licensed Intellectual Property.

(j) The Company has not made a previous assignment, transfer, or agreement in conflict herewith or constituting a present or future assignment of or encumbrance of any of the Licensed Intellectual Property and has not granted any license or sublicense of any material rights under or with respect to any Licensed Intellectual Property.

(k) Company acknowledges that it and any of its direct or indirect owners and Affiliates who assisted in the creation and development of the Licensed Intellectual Property, (i) retain no ownership interest or right to use the Licensed Intellectual Property other than as may be provided under the Bayh-Dole Act or any similar foreign statute, regulation or rule; (ii) have granted an irrevocable assignment of any ownership interest may have in or to such Licensed Intellectual Property; and (iii) irrevocably waive any right or interest, including any moral rights, regarding any such Licensed Intellectual Property, to the extent permitted by applicable Law other than as may be provided under the Bayh-Dole Act or any similar foreign statute, regulation or rule. Except for Scripps, no Licensed Intellectual Property is co-owned by, exclusively licensed to, or otherwise controlled by any other Person, including any current or former employee, officer, director, consultant, contractor, scientist or inventor or clinical or research partner of or associated with the Company other than as may be provided under the Bayh-Dole Act or any similar foreign statute, regulation or rule. The Company does not owe any compensation or remuneration (other than the general compensation for employment or services) to any current or former employee, officer, director, consultant, contractor, scientist or inventor for any Licensed Intellectual Property other than under the IP License Agreement.

(l) By executing and performing its obligations under this Agreement, the Company is not in violation of any agreement between the Company and any third party relating to any of the Licensed Intellectual Property.

(m) Neither the Company nor, to the Company's Knowledge, Scripps, is in breach of or default under, and neither has provided or received any notice of any intention to terminate, the IP License Agreement, and to the Company's Knowledge, no event or circumstance has occurred that, with notice or lapse of time or both, would constitute an event of default under the IP License Agreement or result in a termination or cancellation thereof or would cause or permit the acceleration or other changes of any right or obligation or the loss of any benefit thereunder; the assignment of the IP License in this Agreement was completed in accordance with the terms of the IP License Agreement; and the IP License Agreement is in full force and effect.

Section 3.04 Legal Proceedings; Governmental Orders.

(a) There are no Actions pending or, to the Company's Knowledge, threatened (a) against or by the Company affecting the ownership, rights or efficacy of the IP License Agreement or the Licensed Intellectual Property; or (b) against or by the Company, that challenges or seeks to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To the Knowledge of the Company, no event has occurred or circumstances exist that may give rise to, or serve as a basis for, any such Action.

(b) There are no outstanding Governmental Orders and no unsatisfied judgments, penalties or awards against or affecting the Company with respect to this Agreement, the IP License Agreement, or the Licensed Intellectual Property.

(c) The Company has not received any complaints or notices or Actions from or by any Persons, whether to the Company, or any Governmental Authority with respect to the IP License Agreement or the Licensed Intellectual Property, and to the Company's Knowledge, there exists no reasonable basis for any such notice, complaints or Actions.

Section 3.05 Compliance With Laws; Permits. With respect to this Agreement, the IP License Agreement and the Licensed Intellectual Property:

(a) the Company has complied, and currently complies in all material respects with all Laws applicable to the IP License Agreement and the Licensed Intellectual Property.

Section 3.06 Full Disclosure. No representation or warranty by the Company in this Agreement or any certificate or other document furnished or to be furnished to Buyer pursuant to this Agreement contains any untrue statement of a material fact, or omits to state a material fact necessary to make the statements contained therein, in light of the circumstances in which they are made, not misleading.

Section 3.07 Independent Investigation. The Company has conducted its own independent investigation, review and analysis of the business, results of operations, prospects, condition (financial or otherwise) or assets of Buyer, and acknowledges that it has been provided adequate access to the personnel, properties, assets, premises, books and records, and other documents and data of Buyer for such purpose. Company acknowledges and agrees that: none of Buyer, or any other Person makes or has made any representation or warranty as to Buyer or this Agreement, except as expressly set forth in **Article IV**.

Section 3.08 Investor Representations. Company understands that none of the Transaction Shares have been registered under the Securities Act and that the Transaction Shares are being offered and sold pursuant to an exemption from registration under the Securities Act. Company understands that the Transaction Shares are “restricted securities” under applicable U.S. federal and state securities laws and that, pursuant to these laws, Company must hold the Transaction Shares indefinitely unless the Transaction Shares are registered pursuant to the Securities Act, or an exemption from registration is available. Company understands the Transaction Shares will bear a legend to such effect. Company has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to the Buyer so that it is capable of evaluating the merits and risks of its investment in the Buyer and has the capacity to bear the risks thereof. Company must bear the economic risk of this investment indefinitely unless the Transaction Shares are registered pursuant to the Securities Act, or an exemption from registration is available. Company also understands that there is no assurance that any exemption from registration under the Securities Act will be available and that, even if available, such exemption may not allow Company to transfer all or any portion of the Transaction Shares under the circumstances, in the amounts or at the times Company might propose. Company is acquiring the Transaction Shares for its own account for investment only, and not with a view towards their distribution in violation of any federal or state securities Laws.

ARTICLE IV Representations and Warranties of Buyer

Except as set forth in the SEC Reports, which SEC Reports shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the SEC Reports, or as set forth in the correspondingly numbered Section of the Disclosure Schedules, Buyer represents and warrants to Company that the statements contained in this **Article IV** are true and correct as of the date hereof.

Section 4.01 Organization and Authority of Buyer. Buyer is a corporation duly organized, validly existing and in good standing under the Laws of the state of Nevada. Subject to the consents and authorizations that will be required at the Stockholders’ Meeting, Buyer has full corporate power and authority to enter into this Agreement and the other Transaction Documents to which Buyer 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 Buyer of this Agreement and any other Transaction Document to which Buyer is a party, the performance by Buyer of its obligations hereunder and thereunder and the consummation by Buyer of the transactions contemplated hereby and thereby have been duly authorized by all requisite corporate action on the part of Buyer. This Agreement has been duly executed and delivered by Buyer, and (assuming due authorization, execution and delivery by Company) this Agreement constitutes a legal, valid and binding obligation of Buyer enforceable against Buyer in accordance with its terms.

Section 4.02 No Conflicts; Approvals.

(a) All action on the part of Buyer and its board of directors necessary for (i) the authorization, execution and delivery of this Agreement and (ii) the performance of its obligations hereunder, has been taken or will be taken prior to or upon the Closing, as applicable; provided, however, that Buyer cannot consummate the transactions contemplated hereby unless and until it receives the requisite approval of the Nasdaq and the approval of the Xenetic Stockholders pursuant to Chapter 78 of the Nevada Revised Statutes (as amended) (“NRS”) and the Buyer’s Organizational Documents. This Agreement has been duly executed by Buyer and, assuming the due authorization, execution and delivery by the other parties hereto, constitutes a valid and legally binding obligation of Buyer, except (i) as limited by Laws of general application relating to bankruptcy, insolvency and the relief of debtors and (ii) as limited by rules of Law governing specific performance, injunctive relief or other equitable remedies and by general principles of equity.

(b) The execution, delivery and performance by Buyer 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 Buyer or (b) conflict with or result in a violation or breach of any provision of any Law or Governmental Order applicable to Buyer. Other than Buyer’s filings with the SEC and the approval required by Nasdaq as provided herein, no Approval, Permit, Governmental Order, declaration or filing with, or notice to, any Governmental Authority is required by or with respect to Buyer in connection with the execution and delivery of this Agreement and the other Transaction Documents.

Section 4.03 Brokers. Except as described in Section 4.03 of the Disclosure Schedules, no broker, finder or investment banker is entitled to any brokerage, finder’s 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 Buyer.

Section 4.04 Legal Proceedings. There are no Actions pending or, to Buyer’s knowledge, threatened against or by Buyer or any Affiliate of Buyer that challenge or seek to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To Buyer’s knowledge, no event has occurred or circumstances exist that may give rise or serve as a basis for any such Action.

Section 4.05 Issuance of Transaction Shares. The issuance of the Transaction Shares hereunder is duly authorized (subject to the receipt of the Stockholder Approval) and, when issued and delivered in accordance with this Agreement, will be duly and validly issued, fully paid and nonassessable, will have been issued in compliance with applicable securities Laws or exemptions therefrom, will not be issued in violation of any preemptive rights of any stockholder of Buyer or any other Person and shall be issued and delivered by Buyer to Company and Scripps, pursuant to this Agreement free of any Encumbrance, subject to the restrictions set forth herein and applicable securities Laws.

Section 4.06 Buyer SEC Reports; Financial Statements Except as set forth on Section 4.06 of the Disclosure Schedules, since January 1, 2017, Buyer has filed SEC Reports on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. There have been no material adverse developments in the business of Buyer and its subsidiaries since the respective dates of such SEC Reports that are required to be disclosed pursuant to the Exchange Act that have not been disclosed. The financial statements of Buyer included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with GAAP, except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of Buyer and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

Section 4.07 Tax Matters. Except as set forth in **Section 4.07** of the Disclosure Schedules,

(a) Except as set forth on **Section 4.07** of the Disclosure Schedules, all income Tax Returns and all other material Tax Returns required to be filed by the Buyer and each Subsidiary thereof have been timely filed. Such Tax Returns are true, complete and correct in all material respects. All Taxes due and owing by the Buyer or any Subsidiary thereof (whether or not shown on any Tax Return) have been timely paid.

(b) Buyer and each Subsidiary thereof has withheld and paid each Tax required to have been withheld and paid in connection with amounts paid or owing to any employee, independent contractor, creditor, customer, member or other party, and complied with all information reporting and backup withholding provisions of applicable Law.

(c) Within the past three years, no claim has been made by any taxing authority in any jurisdiction where the Buyer or any Subsidiary of the Buyer does not file Tax Returns that it is, or may be, subject to Tax by that jurisdiction, that has not been finally settled or otherwise resolved.

Section 4.08 Independent Investigation. Buyer has conducted its own independent investigation, review and analysis of the business, results of operations, prospects, condition (financial or otherwise) or assets of the Company relating to the IP License Agreement and the Licensed Intellectual Property, and acknowledges that it has been provided adequate access to the personnel, properties, assets, premises, books and records, and other documents and data of the Company for such purpose. Buyer acknowledges and agrees that: (a) in making its decision to enter into this Agreement and to consummate the transactions contemplated hereby, Buyer has relied solely upon its own investigation and the express representations and warranties of the Company set forth in **Article III** and (b) neither the Company nor any other Person makes or has made any representation or warranty as to the Company or this Agreement, except as expressly set forth in **Article III**.

ARTICLE V
Covenants

Section 5.01 Conduct of Business Prior to the Closing From the date hereof until the earlier to occur of the Closing or the valid termination of this Agreement in accordance with the terms hereof, except as otherwise provided in this Agreement or consented to in writing by Buyer (which consent shall not be unreasonably withheld or delayed), the Company shall (i) maintain and preserve intact the IP License Agreement and the Licensed Intellectual Property (without any amendments thereto or modifications thereof), (ii) pay any obligations thereunder when due, (iii) defend and protect their properties and assets relating to the IP License Agreement and the Licensed Intellectual Property from infringement or usurpation, and (iv) comply in all material respects with all applicable Laws relating to the IP License Agreement and the Licensed Intellectual Property.

Section 5.02 Notice of Certain Events.

(a) From the date hereof until the earlier to occur of the Closing or the valid termination of this Agreement in accordance with the terms hereof, Company shall promptly notify Buyer 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 the Company 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 6.02** to be satisfied;

(ii) any notice or other communication from any Person alleging that the Approval 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, solely in connection with the transactions contemplated by this Agreement;
and

(iv) any Actions commenced or, to Company's Knowledge, threatened against, relating to or involving or otherwise affecting the Company that, if pending on the date of this Agreement, would have been required to have been disclosed pursuant to **Section 3.04** that relates to the consummation of the transactions contemplated by this Agreement.

Section 5.03 Confidentiality. From and after the Closing, the Company shall, and shall cause its respective 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 Licensed Intellectual Property and the IP License Agreement, except to the extent that the Company can show that such information (a) is generally available to and known by the public through no fault of the Company, any of its Affiliates or their respective Representatives; or (b) is lawfully acquired by the Company, 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 Company or its Affiliates or their respective Representatives are compelled to disclose any information by judicial or administrative process or by other requirements of Law, Company shall promptly notify Buyer in writing and shall disclose only that portion of such information which Company is advised by its counsel in writing is legally required to be disclosed, *provided that* Company shall use reasonable best efforts to obtain an appropriate protective order or other reasonable assurance that confidential treatment will be accorded such information.

Section 5.04 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 VI** hereof.

Section 5.05 Stockholders' Meeting; Buyer Domestication

(a) Buyer shall cause a meeting of its stockholders (the "**Stockholders' Meeting**") to be duly called and held as soon as reasonably practicable for the purpose of voting on (i) the approval and adoption of this Agreement and the Share Purchase Agreement, (ii) the approval of the Domestication, to the extent Buyer, in its discretion, determines that such Domestication will be effectuated at the Closing Date, (iii) the approval of the transactions contemplated hereby and in the Share Purchase Agreement, (iv) the approval of the Buyer Financing, (v) the election of Dr. Alexey Vinogradov to the Buyer Board, and (vi) the approval of the issuance of Transaction Shares in connection with the transactions contemplated hereby and issuance of Buyer Common Stock in connection with the Share Purchase Agreement as necessary under the rules and regulations of Nasdaq. Subject to its fiduciary duties, the board of directors of Buyer (the "**Buyer Board**") shall recommend to its stockholders that they vote in favor of such approvals and adoption. In connection with the Stockholders' Meeting, Buyer (a) will use commercially reasonable efforts to file with the SEC as promptly as practicable after the date of this Agreement, and in any event no later than 45 days following the date of this Agreement, an SEC proxy statement pursuant to Section 14(a), Regulation 14A and Schedule 14A under the Exchange Act, and all other proxy materials for the Stockholders' Meeting (the "**Preliminary Proxy Statement**"), (b) as promptly as practicable following receipt of approval from the SEC of the Preliminary Proxy Statement, will file with the SEC and mail to its stockholders a definitive Proxy Statement (the "**Definitive Proxy Statement**") and together the Preliminary Proxy Statement, the "**Proxy Statement**") and other proxy materials, (c) will use commercially reasonable efforts to obtain the necessary or appropriate approvals by its stockholders under the Buyer's Organizational Documents and applicable Law of (i) the approval and adoptions of this Agreement and the Share Purchase Agreement, (ii) the approval of the Domestication, to the extent Buyer, in its discretion, determines that such Domestication will be effectuated at the Closing Date, (iii) the approval of the transactions contemplated hereby and in the Share Purchase Agreement, (iv) the approval of the Buyer Financing, (v) the election of Dr. Alexey Vinogradov, who shall be appointed to fill a vacancy on the Buyer Board, and (vi) the approval of the issuance of Transaction Shares in connection with the transactions contemplated hereby and issuance of Buyer Common Stock in connection with the Share Purchase Agreement as necessary under the rules and regulations of Nasdaq (items (i) through (vi), collectively, the "**Stockholder Approval**"), and (d) will otherwise comply with all Laws applicable to the Stockholders' Meeting.

(b) Buyer will timely provide the Company with all material correspondence received from and to be sent to the SEC. Buyer and the Company will cooperate with each other in finalizing each proposed response; provided that Buyer shall control the final form and substance of any such response.

(c) Company shall use commercially reasonable efforts to provide promptly to Buyer such information concerning the Licensed Intellectual Property and IP License Agreement as is required under applicable Law for inclusion in the Proxy Statement. None of the information supplied or to be supplied by or on behalf of the Company for inclusion or incorporation by reference in the Proxy Statement will, at the time the Proxy Statement is filed with the SEC or at the time it is mailed to Buyer's stockholders, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. If any information provided by the Company is discovered or any event occurs with respect to the Company, or any change occurs with respect to the other information provided by the Company included in the Proxy Statement which is required to be described in an amendment of, or a supplement to, the Proxy Statement so that such document does not include any misstatement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, the Company shall notify Buyer promptly of such event.

(d) To the extent Buyer, in its discretion, determines that Domestication will be effectuated at the Closing Date, promptly following the receipt of the Stockholder Approval, if obtained, but immediately prior to the Closing Date, Buyer shall file (i) with the Secretary of State of the State of Nevada a plan of conversion as contemplated by NRS 92A.105 and take such other steps as are required under the Laws of the State of Nevada with respect to the conversion of Buyer to a State of Delaware corporation and (ii) with the Secretary of State of the State of Delaware a Certificate of Corporate Domestication ("**Certificate of Domestication**") and a Certificate of Incorporation in substantially the form of Buyer's previously existing certificate of incorporation (the "**New Buyer Charter**"), and shall use commercially reasonable efforts to cause the Buyer Board to adopt Bylaws in substantially the form of Buyer's previously existing Bylaws (the "**New Buyer Bylaws**").

Section 5.06 Transaction Filings. As promptly as practicable (but in no event, with respect to filing, later than the date required under applicable Law), Buyer will prepare and file as soon as practicable after closing a resale registration statement to register the resale of the Transaction Shares and any filings required to be filed by it under the Nasdaq, Exchange Act, the Securities Act or any other federal or Blue Sky Laws or other Laws relating to the execution of this Agreement, the completion of the Domestication (in Buyer's discretion) and the consummation of the transactions contemplated hereby, as well as under regulations of or as required by Nasdaq and such Governmental Authorities as may require the filing of such other filings (collectively, the "**Transaction Filings**"). The Company will work together with Buyer as promptly as practicable to prepare the Transaction Filings and provide Buyer whatever information is necessary to accurately complete such filings in a timely manner.

Section 5.07 Listing Application. Buyer shall use its commercially reasonable efforts, to the extent allowed under the rules of Nasdaq, to take all actions and prepare all filings and other documents necessary to be filed with Nasdaq in connection with the listing application for the inclusion of the Buyer Common Stock on Nasdaq in connection with this transaction, conduct ongoing negotiations with Nasdaq with respect to such listing and perform all acts reasonably requested by Nasdaq.

Section 5.08 Public Announcements. Except as required by and in accordance with applicable Law or Nasdaq 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 5.09 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.

Section 5.10 No Termination of IP License Agreement. Between the execution of this Agreement and the Closing, the Company shall use its commercially reasonable efforts to maintain in force and effect the IP License Agreement, and the Company shall not terminate such agreement without the consent of Buyer.

ARTICLE VI Conditions to closing

Section 6.01 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:

(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, and no other Action shall have been commenced against Buyer or the Company which would prevent the Closing.

- (b) Buyer shall have received approval of its listing application to have the Transaction Shares listed on the Nasdaq, subject to official notification.
- (c) All Governmental Authorities' approvals required for the consummation of the transactions contemplated hereby, if any, shall have been obtained.
- (d) The Stockholder Approval shall have been obtained.

(e) A registration statement on Form S-4 accompanying the Proxy Statement shall have become effective under the Securities Act. No stop order suspending the effectiveness of such registration statement will have been issued by the SEC and no proceedings for that purpose and no similar proceeding in respect of such registration statement will have been initiated or, to the knowledge of Buyer, threatened by the SEC.

Section 6.02 Conditions to Obligations of Buyer. The obligations of Buyer to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment or Buyer's waiver, at or prior to the Closing, of each of the following conditions:

- (a) The Company shall have effected the transactions described in **Section 2.03(b)**.

(b) Other than the representations and warranties of the Company contained in **Section 3.01** and **Section 3.02**, the representations and warranties of the Company 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 the Company contained in **Section 3.01** and **Section 3.02**, 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).

(c) The Company, 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.

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

(e) Buyer shall have received adequate financing (the “**Buyer Financing**”), as reasonably determined by Buyer, whether in the form of a private or public offering of debt or equity securities, to fund future working capital obligations of Buyer following the Closing.

(f) The other Transaction Documents shall have been executed and delivered by Company and true and complete copies thereof shall have been delivered to Buyer.

(g) The Share Purchase Agreement, the Voting Agreement and the transactions contemplated thereunder shall have been consummated.

(h) The Company shall have delivered to Buyer such other documents or instruments as Buyer reasonably requests and are reasonably necessary to consummate the transactions contemplated by this Agreement.

Section 6.03 Conditions to Obligations of the Company. The obligations of the Company to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment or Company’s waiver, at or prior to the Closing, of each of the following conditions:

(a) Buyer shall have effected the transactions described in **Section 2.03(a)**.

(b) Other than the representations and warranties of Buyer contained in **Section 4.01**, **Section 4.02** and **Section 4.03**, the representations and warranties of Buyer 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 in all material respects (in the case of any representation or warranty not qualified by materiality) 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 Buyer contained in **Section 4.01**, **Section 4.02** and **Section 4.03** 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.

(c) Buyer 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 it prior to or on the Closing Date.

(d) the Transaction Documents shall have been executed and delivered by Buyer, as applicable, and true and complete copies thereof shall have been delivered to the Company.

(e) The Share Purchase Agreement, the Voting Agreement and the transactions contemplated thereunder shall have been consummated.

(f) Buyer shall have completed the Buyer Financing.

ARTICLE VII
Indemnification

Section 7.01 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 eighteen (18) months from the Closing Date (the “**Non-Fundamental Survival Period**”); *provided*, that the representations and warranties in **Section 3.01** and **Section 3.02**, **Section 4.01**, **Section 4.02**, and **Section 4.05** (collectively, the “**Fundamental Representations**”) shall survive indefinitely. 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, including, if applicable, the Non-Fundamental 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 7.02 Indemnification By Company. Subject to the other terms and conditions of this **Article VII**, Company shall indemnify and defend each of Buyer and its 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 or alleged breach of any of the representations or warranties of the Company contained in this Agreement or in any certificate or instrument delivered by or on behalf of the Company 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, alleged breach or non-fulfillment of any covenant, agreement or obligation to be performed by the Company pursuant to this Agreement;

(c) any amounts owed under the IP License Agreement prior to Closing and any fees or expenses (including without limitation any broker or accounting, legal or other professional fees or expenses) incurred by Company prior to the Closing in connection with the transactions contemplated by this Agreement; and

(d) Taxes of the Company arising from the transfer of the IP License Agreement to Buyer.

Section 7.03 Indemnification By Buyer. Subject to the other terms and conditions of this **Article VII**, Buyer shall indemnify and defend Company and its Affiliates and Representatives (collectively, the “**Company 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 Company Indemnitees based upon, arising out of, with respect to or by reason of:

(a) any inaccuracy in or breach or alleged breach of any of the representations or warranties of Buyer contained in this Agreement or in any certificate or instrument delivered by or on behalf of Buyer 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); or

(b) any breach, alleged breach, or non-fulfillment of any covenant, agreement or obligation to be performed by Buyer pursuant to this Agreement; or

(c) any amounts owed under the IP License Agreement following the Closing Date of the transactions contemplated by this Agreement.

Section 7.04 Certain Limitations. The indemnification provided for in **Section 7.02** and **Section 7.03** shall be subject to the following limitations:

(a) Subject to **Section 7.04(c)**, Company shall not be liable to the Buyer Indemnitees for indemnification under **Section 7.02(a)** until the aggregate amount of all Losses in respect of indemnification under **Section 7.02(a)** exceeds \$50,000 (the “**Basket**”), in which event Company shall be required to pay or be liable for all such Losses in excess of the Basket. Subject to **Section 7.04(c)** and **Section 7.07**, the aggregate amount of all Losses for which Company shall be liable pursuant to **Section 7.02(a)** shall not exceed fifteen percent (15%) of the Transaction Shares issued to OPKO, based on the Closing Price (the “**Cap**”).

(b) Subject to **Section 7.04(c)**, Buyer shall not be liable to the Company Indemnitees for indemnification under **Section 7.03(a)** until the aggregate amount of all Losses in respect of indemnification under **Section 7.03(a)** exceeds the Basket, in which event Buyer shall be required to pay or be liable for all such Losses in excess of the Basket. Subject to **Section 7.04(c)**, the aggregate amount of all Losses for which Buyer shall be liable pursuant to **Section 7.03(a)** shall not exceed the Cap.

(c) Notwithstanding the foregoing, the limitations set forth in **Section 7.04(a)** and **Section 7.04(b)** shall not apply to Losses based upon, arising out of, with respect to or by reason of (i) any inaccuracy in or breach of any Fundamental Representation, (ii) intentional breach, intentional misrepresentation, criminal misconduct, or fraud by any Indemnifying Party, or (iii) **Section 7.02(c)**, **Section 7.02(d)**, or **Section 7.03(c)** (collectively, the “**Indemnification Exclusions**”).

(d) For purposes of this **Article VII**, notwithstanding anything contained herein to the contrary, any inaccuracy in or breach or alleged 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.

Section 7.05 Indemnification Procedures. The party making a claim under this **Article VII** is referred to as the “**Indemnified Party**”, and the party against whom such claims are asserted under this **Article VII** 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 thirty (30) calendar days after receipt of such notice of such Third Party Claim. The failure of the Indemnified Party to give reasonably prompt notice of any Third Party Claim shall not release, waive or otherwise affect the Indemnifying Party’s obligations with respect thereto unless, and only to the extent, that the Indemnifying Party can demonstrate actual material loss and material prejudice as a result 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; *provided*, that such Indemnifying Party shall not have the right to defend or direct the defense of any such Third Party Claim that (x) the Indemnified Party reasonably believes an adverse determination with respect to the Third Party Claim would be materially detrimental to or materially injure the Indemnified Party’s reputation or future business prospects, or (y) seeks an injunction or other equitable relief against the Indemnified Party, and the Indemnifying Party shall be liable for the reasonable fees and expenses of counsel to the Indemnified Party in each jurisdiction for which the Indemnified Party reasonably determines counsel is required. In the event that the Indemnifying Party assumes the defense of any Third Party Claim, 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; (B) there exists a conflict of interest between the Indemnifying Party and the Indemnified Party; or (C) the claim for indemnification relates to or arises in connection with any criminal or quasi criminal or regulatory proceeding, action, indictment, allegation or investigation, the Indemnifying Party shall be liable for the reasonable fees and expenses of counsel to the Indemnified Party in each jurisdiction for which the Indemnified Party determines counsel is required. If the Indemnifying Party elects not to compromise or defend such Third Party Claim, fails to promptly notify the Indemnified Party in writing of its election to defend as provided in this Agreement, or fails to diligently prosecute the defense of such Third Party Claim, the Indemnified Party may, 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. The Company and Buyer 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 5.03**) 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 or appropriate persons of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim. 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.

(b) **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 thirty (30) days after the Indemnified Party has actual knowledge of such Direct Claim. The failure of the Indemnified Party to give reasonably prompt notice of any Direct Claim shall not release, waive or otherwise affect the Indemnifying Party’s obligations with respect thereto unless, and only to the extent, that the Indemnifying Party can demonstrate actual material loss and material prejudice as a result 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 thirty (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 Company’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.

Section 7.06 Payments. Once a Loss is agreed to by the Indemnifying Party or is determined to be payable pursuant to this **Article VII**, the Indemnifying Party shall satisfy its obligations within two (2) Business Days of such determination by wire transfer of immediately available funds.

Section 7.07 Exclusive Remedies. Subject to **Section 9.11**, 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 VII**. 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 this **Article VII**. Nothing in this **Section 7.07** 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 party’s fraudulent, criminal or intentional misconduct.

ARTICLE VIII
Termination

Section 8.01 Termination. This Agreement may be terminated at any time prior to the Closing:

- (a) by the mutual written consent of Company and Buyer;
- (b) by Buyer by written notice to Company if:

- (i) Buyer is 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 the Company pursuant to this Agreement that would give rise to the failure of any of the conditions specified in **Article VI** and such breach, inaccuracy or failure has not been cured by the Company within ten (10) days of Company's receipt of written notice of such breach from Buyer; or

- (ii) any of the conditions set forth in **Section 6.01** or **Section 6.02** shall not have been, or if it becomes apparent that any of such conditions will not be, fulfilled by July 1, 2019, unless such failure shall be due to the failure of Buyer 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 Company by written notice to Buyer if:

- (i) the Company is 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 Buyer pursuant to this Agreement that would give rise to the failure of any of the conditions specified in **Article VI** and such breach, inaccuracy or failure has not been cured by Buyer within ten (10) days of Buyer's receipt of written notice of such breach from Company; or

- (ii) any of the conditions set forth in **Section 6.01** or **Section 6.03** shall not have been, or if it becomes apparent that any of such conditions will not be, fulfilled by July 1, 2019, unless such failure shall be due to the failure of the Company to perform or comply with any of the covenants, agreements or conditions hereof to be performed or complied with by any of them prior to the Closing; or

- (d) by Buyer or Company 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 8.02 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 VIII** and **Article IX** hereof; and

- (b) that nothing herein shall relieve any party hereto from liability for any willful breach or material breach of any provision hereof, or for fraud or criminal misconduct.

ARTICLE IX
Miscellaneous

Section 9.01 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 9.02 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 9.02**):

If to Company:

OPKO Pharmaceuticals, LLC
4400 Biscayne Boulevard
Miami, FL 33137
Facsimile: 305-575-4140
E-mail: MBrowder@opko.com
Attention: Monte Browder, Esq.

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

OPKO Health, Inc.
4400 Biscayne Boulevard
Miami, FL 33137
Facsimile: 305-575-4140
E-mail: KInman@opko.com, SRubin@opko.com
Attn: Kate Inman, Esq.,
Steve Rubin

If to Buyer:

Xenetic Biosciences, Inc.
40 Speen Street, Suite 102
Framingham, MA 01701
E-mail: j.eisenberg@xeneticbio.com
Attn: Special Committee
Jeffrey F. Eisenberg, Chief Executive Officer

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

Akerman LLP
Three Brickell City Centre
98 Southeast Seventh Street
Suite 1100
Miami, Florida 33131
Facsimile: (305) 374.5095
Email: Teddy.Klinghoffer@Akerman.com
Andrea.Fisher@Akerman.com
Attn: Teddy Klinghoffer, Esq.
Andrea Fisher Evans, Esq.

Section 9.03 Interpretation. For purposes of this Agreement, (a) 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.

Section 9.04 Headings. The headings in this Agreement are for reference only and shall not affect the interpretation of this Agreement.

Section 9.05 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. 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 9.06 Entire Agreement. This Agreement, the Disclosure Schedules 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. No Party is relying on any representation and warranty of the other party not specifically set forth herein. 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 9.07 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, Buyer may, without the prior written consent of Company assign all or any portion of its 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 9.08 No Third-party Beneficiaries Except as provided in **Article VII**, 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 9.09 Amendment and Modification; Waiver. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by Buyer and Company. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by Buyer or Company. 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 9.10 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 Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

(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 DELAWARE IN EACH CASE LOCATED IN THE COUNTY OF NEW CASTLE, 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 9.10(C).

Section 9.11 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 specific performance of the terms hereof, in addition to any other remedy to which they are entitled at law or in equity.

Section 9.12 Prevailing Party Fees. In the event of a dispute arising under this Agreement or any Transaction Documents, if a lawsuit is filed, the prevailing Party shall be entitled to recover its attorneys' fees, costs and expenses, including those incurred in any appellate proceeding or in the process of determining the amount of such fees, or in collection or enforcement of any judgment, award or the like, from the non-prevailing party.

Section 9.13 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.

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.

ASSIGNEE:

OPKO PHARMACEUTICALS, LLC

By: /s/ Dr. Phillip Frost

Name: Dr. Phillip Frost

Title: Chairman & Chief Executive Officer

BUYER:

XENETIC BIOSCIENCES, INC.

By: /s/ Jeffrey Eisenberg

Name: Jeffrey Eisenberg

Title:CEO

Exhibit A
Lock-up Agreement

EXHIBIT A

_____, 2019

Xenetic Biosciences, Inc.
40 Speen Street, Suite 102
Framingham, MA 01701
Attn: Jeffrey F. Eisenberg, Chief Executive Officer

Ladies and Gentlemen:

OPKO Pharmaceuticals, LLC, a limited liability corporation organized under the laws of the state of Delaware, whose address is 4400 Biscayne Boulevard, Miami, FL 33137, USA (“**OPKO**”) understands that as an inducement to Xenetic Biosciences, Inc. (the “**Buyer**”) to enter into that certain Assignment Agreement dated as of March 1, 2019, by and among Buyer and OPKO, and the transactions contemplated thereby, OPKO hereby enters into this lock-up agreement (this “**Lock-Up Agreement**”) and agrees that OPKO will not, during the period commencing on the date hereof and ending one hundred eighty (180) days after the date hereof (the “**Lock-Up Period**”), (1) 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, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of Buyer or any securities convertible into or exercisable or exchangeable for shares of capital stock of Buyer, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the “**Lock-Up Securities**”); (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Lock-Up Securities, whether any such transaction is to be settled by delivery of shares of Lock-Up Securities, in cash or otherwise; (3) make any demand for or exercise any right with respect to the registration of any Lock-Up Securities; or (4) publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement relating to any Lock-Up Securities. Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer Lock-Up Securities as a *bona fide* gift, by will or intestacy, or to a family member or trust for the benefit of a family member (for purposes of this Lock-Up Agreement, “family member” means any relationship by blood, marriage or adoption, not more remote than first cousin) or as a *bona fide* gift to a charity or educational institution; *provided* that in the case of any such transfer pursuant to the foregoing, (i) any such transfer shall not involve a disposition for value, (ii) each transferee shall sign and deliver to Buyer a lock-up agreement substantially in the form of this Lock-Up Agreement, and (iii) no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made, except for a Form 5. OPKO also agrees and consents to the entry of stop transfer instructions with Buyer's transfer agent and registrar against the transfer of the undersigned's Lock-Up Securities, except in compliance with this Lock-Up Agreement.

OPKO understands that this Lock-Up Agreement is irrevocable and shall be binding upon OPKO's legal representatives, successors, and assigns.
Very truly yours,

OPKO Pharmaceuticals, LLC

By: _____
[Name]
Its: _____
[Title]

Exhibit B

THE SYMBOL “[**]” DENOTES PLACES WHERE CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT IS BOTH (i) NOT MATERIAL, AND (ii) WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED**

**LICENSE AGREEMENT
BETWEEN
OPKO PHARMACEUTICALS, LLC
AND
THE SCRIPPS RESEARCH INSTITUTE**

THIS Agreement (the “AGREEMENT”) is between OPKO Pharmaceuticals, LLC, a Delaware limited liability company having a principal place of business located at 4400 Biscayne Boulevard, Miami, Florida 33138 (“LICENSEE”), and The Scripps Research Institute, a California, nonprofit public benefit corporation, whose address is 10550 North Torrey Pines Road, La Jolla, California 92037 (“SCRIPPS” or “LICENSOR”).

RECITALS

- A. LICENSOR is engaged in fundamental scientific biomedical and biochemical research including research relating to, among other things, development of highly selective ligands of B cell receptors expressed on lymphoma cells and related cytotoxic drugs including CAR-T therapeutics, that may be useful for the treatment of lymphoma.
- B. LICENSEE is engaged in research and development of therapeutic and diagnostic products for major unmet medical needs including renal diseases and disorders, urological diseases and disorders, metabolic diseases and disorders and other diseases and conditions.
- C. LICENSOR has the exclusive right to grant a license to its ownership interest in the PATENT RIGHTS and the SCRIPPS TECHNOLOGY (each as hereinafter defined), subject to certain rights of the U.S. Government resulting from the receipt by LICENSOR of certain funding from the U.S. Government.
- D. LICENSOR desires to grant to LICENSEE and LICENSEE wishes to acquire, an exclusive worldwide right and license to LICENSOR’s interest in the PATENT RIGHTS and SCRIPPS TECHNOLOGY, subject to the terms and conditions set forth herein, with a view to developing and marketing therapeutic products.

NOW, THEREFORE, in consideration of the mutual covenants and premises herein contained, the parties agree as follows:

1. EFFECTIVE DATE

This AGREEMENT is effective February 25, 2019 (“EFFECTIVE DATE”).

2. DEFINITIONS

As used in this AGREEMENT, the following terms have the meanings indicated:

2.1 **AFFILIATE** means any entity which directly or indirectly controls, or is controlled by LICENSEE. The term "control" as used herein means (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares entitled to vote for the election of directors; or (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities. AFFILIATES shall be subject to all obligations and liabilities imposed upon LICENSEE under this Agreement. Unless otherwise specified, the term LICENSEE includes AFFILIATES.

2.2 **CHALLENGE.** LICENSEE or a SUBLICENSEE (as applicable) will be deemed to have made a "CHALLENGE" of the PATENT RIGHTS if LICENSEE or its SUBLICENSEE: (a) institutes or maintains, or causes its counsel to institute or maintain on LICENSEE’s or such SUBLICENSEE’s behalf, any interference, opposition, re-examination, post-grant review, or similar proceeding with respect to any PATENT RIGHTS with the U.S. Patent and Trademark Office or any foreign patent office; or (b) makes any filing or institutes or maintains any action or legal proceeding on LICENSEE’s or such SUBLICENSEE’s behalf with a court or other governmental body (including, without limitation, the U.S. Patent and Trademark Office or any foreign patent office) alleging (or authorizes the institution of any such action or proceeding alleging) that any of the PATENT RIGHTS are invalid or unenforceable.

2.3 **FDA** means the US Food and Drug Administration, or any successor entity.

2.4 **LICENSED PROCESS** means any process or method claimed in the PATENT RIGHTS.

2 . 5 **LICENSED PRODUCT** means a product (a) the manufacture, importation, sale, offer for sale or use of which would, but for the license granted herein, infringe any of the PATENT RIGHTS, (b) that is comprised of, utilizes, or incorporates any SCRIPPS TECHNOLOGY, or (c) that is made using a LICENSED PROCESS.

2 . 6 **NET SALES** means the gross amounts invoiced by LICENSEE or its SUBLICENSEE on all SALES of LICENSED PRODUCTS, which are covered by a VALID CLAIM, to customers, including resellers and distributors, [****], (if not previously deducted from the amount invoiced): (a) [****], (b) [****], (c) [****], (d) [****], and (e) [****].

The deductible items listed in sub-clauses (a) – (e) above shall be either (i) included as line items on the invoice, or (ii) documented as being specifically attributable to actual sales of LICENSED PRODUCTS, in accordance with United States Generally Accepted Accounting Principles (“**GAAP**”) or International Financing Reporting Standards (“**IFRS**”), as applicable, consistently applied throughout the organization of the selling party, provided that such amounts are included in the quarterly royalty reports that LICENSEE sends to LICENSOR pursuant to Section 5.6. If LICENSEE or other selling party receives refunds or reimbursements of any amounts deducted as set forth herein, then such refunded or reimbursed amounts shall be considered NET SALES in the applicable reporting period in which such refunded or reimbursed amounts are received.

In the event that a product containing the LICENSED PRODUCT is SOLD in a finished combination package containing such LICENSED PRODUCT packaged together in combination with one or more other products, devices, equipment or components (a “**COMBINATION PRODUCT**”), NET SALES for such COMBINATION PRODUCT will be calculated by multiplying actual NET SALES of such COMBINATION PRODUCT by the fraction $A/(A+B)$ where A is the selling price of the LICENSED PRODUCT if SOLD separately in finished form and B is the selling price of any other products, equipment or components in the COMBINATION PRODUCT if sold separately in finished form provided that the selling price of any COMBINATION PRODUCT shall not be less than A+B. In the event that a product containing LICENSED PRODUCT or one or more of such products, equipment or components in the COMBINATION PRODUCT are not sold separately, then the parties shall negotiate in good faith a formula for calculating NET SALES for such COMBINATION PRODUCT that reflects the respective contributions of the product containing LICENSED PRODUCT and such other products, equipment or components to the overall value of such COMBINATION PRODUCT. LICENSEE covenants that it will not intentionally manipulate any part of the fraction $A/(A+B)$ to avoid or reduce royalty payments or obligations that would otherwise be due for sales of LICENSED PRODUCT in combination form or otherwise.

2.7 **PATENT RIGHTS** shall mean:

- a. the patents and application(s) set forth on **EXHIBIT A** attached hereto;
- b. the foreign counterpart patent applications of the respective applications referenced in subclause (a) above, but only to the extent the claims of such foreign applications are entitled to the priority date of the respective application(s) referenced in subclause (a) above;
- c. the patents issued from the application(s) referenced in subclauses (a) and (b);
- d. divisionals, continuations, reissues, reexaminations, and extensions of any patent or application set forth in subclauses (a) - (c) above;
- e. all claims of continuations-in-part of any applications referenced in subclauses (a) and (b) above, provided that the claims of such applications are entitled to the benefit of the priority date of the application(s) referenced in subclause (a) above.

2.8 **SCRIPPS TECHNOLOGY** means LICENSOR's technology that is described in the **PATENT RIGHTS** and is inclusive of information, data and know-how made or developed by LICENSOR in the course of its activities leading to its submission of the publication entitled "Autocrine-based Selection of Ligands for Personalized CAR-T Therapy of Lymphoma" with authors that are inclusive of LICENSOR's employees Richard A. Lerner and Jia Xie and multiple additional non-LICENSOR authors. LICENSOR's ownership interest in the **PATENT RIGHTS** and the **SCRIPPS TECHNOLOGY** derives from employees Richard A. Lerner and Jia Xie's activities undertaken under an employment agreement with LICENSOR and/or through an assignment of patent rights.

2.9 **SALE, SELL or SOLD** means the transfer or disposition for value of a **LICENSED PRODUCT** to a party other than **LICENSEE** or **SUBLICENSEES**.

2.10 **SUBLICENSEE** means any third party to whom the **LICENSEE** grants a sublicense with respect to the rights conferred upon the **LICENSEE** under this **AGREEMENT**, as contemplated by Section 4.4. In addition, "SUBLICENSEE" shall include any further third party **SUBLICENSEES** that may be permitted under Section 4.4.

2.11 **SUBLICENSE REVENUES** means all revenues and other consideration paid to the **LICENSEE** or to an **AFFILIATE** in consideration of (a) the grant of rights that includes a sublicense to the **PATENT RIGHTS**, (b) the grant of distribution or marketing rights with respect to **LICENSED PRODUCTS**, and/or (c) the sale or other transfer of that portion of **LICENSEE'S** or an **AFFILIATE'S** business or assets that relates to the rights granted under this **AGREEMENT**. **SUBLICENSE REVENUES** shall not include any consideration received for sales made through an asset sale, stock sale, merger or other combination, or any other transfer of **LICENSEE'S** entire business (a "Change of Control Event"). Without limiting the generality of the foregoing, **SUBLICENSE REVENUES** shall include all upfront fees, license fees, milestone payments, technology access fees, premiums above the fair market value on sales of **LICENSEE'S** or an **AFFILIATE'S** debt or equity securities, annual maintenance fees, and any other payments with respect to such sublicense, distribution or marketing rights, or sale or other transfer. **SUBLICENSE REVENUES** include amounts received from a **SUBLICENSEE** under the terms of the agreement in which the sublicense is granted and under the terms of other agreements entered into between **LICENSEE** and **SUBLICENSEE** as part of the same transaction as the agreement that includes the grant of the sublicense. However, **SUBLICENSE REVENUES** shall exclude: (i) royalties on a **SUBLICENSEE'S** sales of **LICENSED PRODUCTS**; and (ii) payments for **LICENSEE'S** or an **AFFILIATE'S** debt or equity securities that are at or below the fair market value of such securities as of the date of receipt of such payments as mutually determined by the parties. Any non-cash **SUBLICENSE REVENUES** received by **LICENSEE** or by an **AFFILIATE** shall be valued at its fair market value as of the date of receipt as mutually determined by the parties. Any such non-cash **SUBLICENSE REVENUES** received by **LICENSEE** (i.e., equity) shall be passed through to **LICENSOR** in the same form received by **LICENSEE** consistent with the terms herein.

2.12 **TERRITORY** means worldwide.

2.13 **VALID CLAIM** means a claim of an issued and unexpired patent or a claim of a pending patent application within the PATENT RIGHTS which has not been held unpatentable, invalid or unenforceable by a court or other government agency of competent jurisdiction and has not been admitted to be invalid or unenforceable through reissue, reexamination, disclaimer or otherwise; provided, however, that if the holding of such court or agency is later reversed by a court or agency with overriding authority, the claim shall be reinstated as a VALID CLAIM with respect to NET SALES made after the date of such reversal. Notwithstanding the foregoing provisions of this Section 2.13, if a claim of a pending patent application within the PATENT RIGHTS has not issued as a claim of an issued patent within the PATENT RIGHTS, within nine (9) years after the filing date from which such claim takes priority, such pending claim shall not be a VALID CLAIM for purposes of this AGREEMENT.

3. WARRANTY AND LIMITATION OF LIABILITY

3.1 LICENSOR MAKES NO WARRANTIES OR REPRESENTATIONS CONCERNING THE SCRIPPS TECHNOLOGY OR PATENT RIGHTS, OR ANY OTHER MATTER WHATSOEVER, INCLUDING WITHOUT LIMITATION ANY EXPRESS, IMPLIED, OR STATUTORY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, TITLE, ACCURACY, OR ARISING OUT OF COURSE OF CONDUCT OR TRADE CUSTOM OR USAGE, AND LICENSOR DISCLAIMS ALL SUCH EXPRESS, IMPLIED, OR STATUTORY WARRANTIES. LICENSOR MAKES NO WARRANTY OR REPRESENTATION AS TO THE VALIDITY, SCOPE, OR ENFORCEABILITY OF THE PATENT RIGHTS OR THE SCRIPPS TECHNOLOGY, OR THAT ANY LICENSED PRODUCT, LICENSED PROCESS, PATENT RIGHTS, OR SCRIPPS TECHNOLOGY WILL BE FREE FROM AN INFRINGEMENT ON PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR THAT NO THIRD PARTIES ARE IN ANY WAY INFRINGING UPON ANY PATENT RIGHTS OR SCRIPPS TECHNOLOGY COVERED BY THIS AGREEMENT. FURTHER, LICENSOR HAS MADE NO INVESTIGATION AND MAKES NO REPRESENTATION OR WARRANTY THAT THE PATENT RIGHTS OR THE SCRIPPS TECHNOLOGY ARE SUITABLE FOR LICENSEE'S PURPOSES.

3.2 IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES (INCLUDING FOR LOST PROFITS OR EXPECTED SAVINGS) ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER, EXCEPT WITH RESPECT TO LICENSEE'S INDEMNITY OBLIGATIONS UNDER SECTION 11. LICENSOR'S AGGREGATE LIABILITY, IF ANY, FOR ALL DAMAGES OR OTHER RELIEF OF ANY KIND RELATING TO THIS AGREEMENT OR ITS SUBJECT MATTER SHALL NOT EXCEED THE AMOUNT PAID BY LICENSEE TO LICENSOR UNDER THIS AGREEMENT. THE FOREGOING EXCLUSIONS AND LIMITATIONS SHALL APPLY TO ALL CLAIMS AND ACTIONS OF ANY KIND AND ON ANY THEORY OF LIABILITY, WHETHER BASED ON CONTRACT, TORT (INCLUDING, BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY), OR ANY OTHER GROUNDS, AND REGARDLESS OF WHETHER SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. THE PARTIES FURTHER AGREE THAT EACH WARRANTY DISCLAIMER, EXCLUSION OF DAMAGES OR OTHER LIMITATION OF LIABILITY HEREIN IS INTENDED TO BE SEVERABLE AND INDEPENDENT OF THE OTHER PROVISIONS BECAUSE THEY EACH REPRESENT SEPARATE ELEMENTS OF RISK ALLOCATION BETWEEN THE PARTIES.

4. LICENSE

4.1 Subject to Sections 4.2 and 4.3 hereof, LICENSOR hereby grants to LICENSEE an exclusive, worldwide, royalty-bearing license, with rights to sublicense under Section 4.4, to the PATENT RIGHTS to develop, make, have made, use, have used, sell, have sold, offer to sell, and import LICENSED PRODUCTS and/or LICENSED PROCESSES. LICENSOR hereby grants to LICENSEE a non-exclusive, worldwide license to SCRIPPS TECHNOLOGY.

4.2 LICENSEE and LICENSOR acknowledge that LICENSOR has received, and expects to continue to receive, funding from the United States Government in support of LICENSOR's research activities. LICENSEE and LICENSOR acknowledge and agree that their respective rights and obligations pursuant to this AGREEMENT shall be subject to the rights of the United States Government, existing and as amended, which may arise or result from LICENSOR's receipt of research support from the United States Government, including but not limited to, 37 CFR 401, the National Institutes of Health ("NIH") Grants Policy Statement and the NIH Guidelines for Obtaining and Disseminating Biomedical Research Resources.

4.3 LICENSOR reserves the right to use the PATENT RIGHTS and SCRIPPS TECHNOLOGY for any internal, non-commercial, research or educational purposes without LICENSOR being obligated to pay LICENSEE any royalties or other compensation or to account to LICENSEE in any way. In addition, LICENSOR reserves the right to grant non-exclusive licenses to use the PATENT RIGHTS or the SCRIPPS TECHNOLOGY for internal, non-commercial research and educational purposes to other nonprofit or academic institutions, without the other nonprofit or academic institution being obligated to pay LICENSEE any royalties or other compensation or to account to LICENSEE in any way provided that in each case LICENSOR and the non-exclusive licensees are prohibited from developing, making, having made, using, importing, exporting, distributing, selling or offering for sale LICENSED PRODUCTS.

4.4 LICENSEE may grant sublicenses in the TERRITORY to any party with respect to the rights conferred upon LICENSEE under this AGREEMENT. SUBLICENSEES shall not have the right to further sublicense without LICENSOR's prior written consent, which shall not be unreasonable withheld. This consent requirement does not apply to any assignments to an AFFILIATE; or made as part of a sale, regardless of whether such a sale occurs through an asset sale, stock sale, merger or other combination, or any other transfer of LICENSEE'S entire business; or that part of LICENSEE's business that exercise all rights granted under this AGREEMENT. Any sublicense granted under this Section 4.4 shall be subject in all respects to the applicable provisions contained in this AGREEMENT (including the provisions regarding government interest, reservation of rights, development efforts, reporting, audit rights, indemnity, insurance, CHALLENGES, warranty disclaimer, limitation of liability, confidentiality, and rights upon expiration or termination). In the event of a conflict between this AGREEMENT and the terms of any sublicense, the terms of this AGREEMENT shall control. LICENSEE shall at all times remain responsible for the compliance by any SUBLICENSEE with the terms of this AGREEMENT, including the payment of all amounts that may become due hereunder as a result of any SUBLICENSEE's activities. LICENSEE must deliver to LICENSOR a true and correct copy of each sublicense granted by LICENSEE, and any modification or termination thereof, within 30 days after execution, modification, or termination. If this AGREEMENT is terminated, LICENSOR agrees to accept existing SUBLICENSEES in good standing at the date of termination, provided that such SUBLICENSEES continue to be in compliance with all of the terms of this AGREEMENT.

4.5 This AGREEMENT confers no license or rights by implication, estoppel, or otherwise under any patent application, patent, or SCRIPPS' intellectual property other than the PATENT RIGHTS regardless of whether such patent application, patent, or intellectual property is dominant or subordinate to the PATENT RIGHTS.

5. PAYMENTS AND REPORTS

5.1 In consideration of rights granted by LICENSOR to LICENSEE under this AGREEMENT, LICENSEE will pay or deliver to LICENSOR the consideration provided for in this Article 5. [****] LICENSEE shall pay to LICENSOR a royalty equal [****] for all LICENSED PRODUCTS (the "ROYALTY").

5.2 All SUBLICENSE REVENUES shall be reported and SUBLICENSE PAYMENTS (defined below) paid to LICENSOR by LICENSEE within [****] of LICENSEE's receipt of such SUBLICENSE REVENUES. LICENSEE's reports to LICENSOR regarding SUBLICENSE REVENUES shall contain an explanation and calculation of the amount of SUBLICENSE PAYMENTS due to LICENSOR. LICENSEE shall pay LICENSOR a non-creditable, non-refundable percentage of SUBLICENSE REVENUES ("SUBLICENSE PAYMENTS") as follows: [****] of SUBLICENSE REVENUES received within [****] from the EFFECTIVE DATE; [****] of SUBLICENSE REVENUES received after [****] from the EFFECTIVE DATE and before [****] from the EFFECTIVE DATE; and [****] of SUBLICENSE REVENUES received after [****] from the EFFECTIVE DATE.

For clarity, LICENSEE shall not be obligated to pay any portion of sublicensing fees or payments it receives from a third party which are attributable to a sublicense or grant of rights to LICENSEE technology which does not constitute part of the PATENT RIGHTS. For further clarity, LICENSOR acknowledges that LICENSEE intends to assign its rights under this AGREEMENT to Xenetic Biosciences, Inc., a Nevada corporation ("XBIO") (the "XBIO ASSIGNMENT") in exchange for 2,625,000 shares of XBIO common stock (the "LICENSEE XBIO SHARES"). The XBIO ASSIGNMENT will be considered a sublicense or assignment for purposes of this AGREEMENT. At the closing of the XBIO ASSIGNMENT, LICENSEE shall direct that 656,250 of the LICENSEE XBIO SHARES (the "SHARES") be issued to LICENSOR as the sole SUBLICENSE PAYMENT for the XBIO ASSIGNMENT (with LICENSEE retaining the remaining 1,968,750 LICENSEE XBIO SHARES). At the closing of the XBIO ASSIGNMENT, LICENSOR agrees to execute that certain Lock-Up Agreement, attached hereto as **EXHIBIT B** with respect to its SHARES and to be bound by the terms thereof. It is the parties' intent that all the benefits and burdens of ownership of the SHARES will be issued to the LICENSOR on the closing date of the XBIO ASSIGNMENT. From and after the effective date of the XBIO ASSIGNMENT and the issuance of 656,250 SHARES to LICENSOR pursuant to this provision, XBIO shall be deemed to be the LICENSEE hereunder, and OPKO Pharmaceuticals, LLC shall have no further obligations to LICENSOR under this AGREEMENT.

5.3 LICENSEE also agrees to pay and shall pay LICENSOR the following non-creditable, non-refundable milestones as follows:

Milestone	Payment
Upon a Change of Control Event in which total consideration is less than or equal to \$[****]	\$ [****]
Upon a Change of Control Event in which total consideration exceeds \$[****]	\$ [****]
[****]	\$ [****]
Upon reaching aggregate NET SALES of \$[****] in any combination of markets and/or indications	\$ [****]
Upon reaching aggregate NET SALES of \$[****] in any combination of markets and/or indications	\$ [****]

5.4 In the event of late payments to LICENSOR due under this Article 5, a penalty of [****] of the amount due will be assessed monthly and due additionally from LICENSEE for each such late payment.

5.5 During the term of this AGREEMENT and for [****] thereafter, LICENSEE agrees to keep complete and accurate records of its and its SUBLICENSEES' NET SALES under the license granted in this AGREEMENT in sufficient detail to enable the royalties and milestones payable hereunder to be determined. LICENSOR shall have the right to request that an audit be performed on LICENSEE's accounting records by an independent auditor reasonably acceptable to LICENSEE, on a confidential basis, for the purpose of determining whether LICENSEE has complied with the payment and expenditure terms of this AGREEMENT. LICENSOR agrees such audits shall not be requested any more frequently than [****]. If a payment deficiency for [****], whichever is larger, then [****]. The auditor shall disclose to LICENSOR only information relating to the accuracy of the payments and required expenditures.

5.6 Within [****] after the end of [****] of the valid term of this AGREEMENT, beginning immediately after the first commercial SALE of LICENSED PRODUCT or LICENSED PROCESS, LICENSEE must deliver to LICENSOR a true and accurate written report, even if no payments are due LICENSOR, giving the particulars of the business conducted by LICENSEE and its SUBLICENSEE(S), if any exist, during the preceding [****] under this AGREEMENT as are pertinent to calculating payments hereunder. Such reports will be on a per-country and per-product basis and presented substantially in the form as shown in **EXHIBIT C** attached hereto. Simultaneously with the delivery of each report, LICENSEE must pay to LICENSOR the amount due, if any, for the period of each report.

5.7 All amounts payable here by LICENSEE must be paid in United States dollars without deductions for taxes, assessments, fees, or charges of any kind. Royalties accruing on SALES in countries other than the United States must be paid in United States dollars in amounts based on the rate of exchange as quoted in the Wall Street Journal (WSJ) as of the last business day of the reporting period. If the WSJ does not publish any such rate, a comparable rate publication will be agreed upon from time to time by the parties, and with respect to each country for which such rate is not published by the WSJ or in a comparable publication, the parties will use the prevailing rate for bank cable transfers for such date, as quoted by leading United States banks in New York City dealing in the foreign exchange market.

5.8 All payments must be payable to LICENSOR and sent to the address listed in Section 17.2.

5.9 Payment Increase in the Event of a CHALLENGE

a. In the event LICENSEE or a SUBLICENSEE directly institutes, makes, or maintains any CHALLENGE, the royalty obligations specified in Section 5 shall be [****] from the date the challenging party first institutes or makes such CHALLENGE and during the pendency of such CHALLENGE, and shall continue to apply after the conclusion of such CHALLENGE in the event that at least [****].

b. LICENSEE will provide written notice to SCRIPPS at [****] prior to LICENSEE or a SUBLICENSEE instituting or making any CHALLENGE, and LICENSEE agrees that the challenging party will not institute such CHALLENGE for at least [****] after the date of such notice. [****]. During such [****] period, the parties will discuss the same and attempt in good faith to resolve such issues.

6. DILIGENCE; REGULATORY MATTERS

6.1 LICENSEE agrees that during the term of this AGREEMENT, it shall use (whether directly or through its SUBLICENSEES) commercially reasonable efforts to develop and commercialize, or have developed and commercialized, LICENSED PRODUCTS in the TERRITORY. [****]. It is understood by LICENSEE and LICENSOR that prospective development is preliminary in nature and the actual development schedule and timing will vary based upon relevant factors at the time, including the results of animal, human and toxicology studies, the ability to synthesize and manufacture compounds for clinical and commercial use, patent and other proprietary positions of the product, product labeling or anticipated labeling, market potential, financial return, medical and clinical considerations, regulatory environment and competitive market conditions, and other technical, legal, scientific, medical or commercial factors. Thereafter, LICENSEE shall continue to diligently undertake and pursue the development and commercialization of the LICENSED PRODUCTS. If at any time, LICENSEE determines to formally discontinue development or commercialization of the LICENSED PRODUCTS, LICENSEE shall notify LICENSOR in writing within [****] of such decision. If LICENSEE fails to comply with the commercially reasonable efforts described above or formally discontinues development or commercialization of LICENSED PRODUCT, LICENSOR shall notify LICENSEE of its position with respect to such efforts and LICENSEE shall have at least [****] to provide evidence of such commercially reasonable efforts. If the Parties do not resolve this matter within [****] thereafter, the dispute can move to alternative dispute resolution pursuant to Section 16 herein.

6.2 Should LICENSEE commence manufacture and/or marketing of LICENSED PRODUCTS in the TERRITORY, it hereby represents and warrants that it shall make, offer to sell and sell LICENSED PRODUCTS in the TERRITORY, and otherwise conduct its market activities, in compliance with all laws, regulations, safety and health requirements, and other conditions imposed by the governmental authorities of the jurisdictions in which LICENSEE shall make and/or sell the LICENSED PRODUCT.

6.3 Except as otherwise set forth herein, LICENSEE shall be solely responsible for all communications with governmental authorities in connection with the LICENSED PRODUCT in the TERRITORY. [****]

7. TERM; TERMINATION

7.1 The term of this AGREEMENT shall begin on the EFFECTIVE DATE of this AGREEMENT and continue until this AGREEMENT is terminated as provided herein or until the expiration of the last-to-expire patent within the PATENT RIGHTS in the TERRITORY, or following [****] from the first commercial SALE of a LICENSED PRODUCT, whichever is later, on a country-by-country basis.

7.2 This AGREEMENT will terminate:

- a. automatically if LICENSEE becomes bankrupt and/or if the business of LICENSEE is placed in the hands of a receiver, assignee, or trustee, whether by voluntary act of LICENSEE or otherwise, makes an assignment for the benefit of creditors, or has any other proceedings filed against LICENSEE under any bankruptcy or insolvency laws; or
- b. upon [****] written notice from LICENSOR if LICENSEE becomes insolvent unless, before the end of the [****] period, LICENSEE provides LICENSOR with evidence of its solvency; or
- c. upon [****] written notice from LICENSOR if LICENSEE breaches or defaults on its obligation to make payments (if any are due) or reports, in accordance with the terms of Article 5 hereunder, unless, before the end of the [****] period, LICENSEE has cured the breach or default and so notifies LICENSOR, stating the manner of the cure; or
- d. upon [****] written notice if LICENSEE breaches or defaults on any other obligation under this AGREEMENT, unless, before the end of the [****] period, LICENSEE has cured the breach or default and so notifies LICENSOR, stating the manner of the cure; or
- e. at any time by mutual written agreement between LICENSEE AND LICENSOR; or
- f. if LICENSEE defaults upon its indemnification or insurance obligations under Article 11 unless LICENSEE has contested and/or cured the default and so notifies LICENSOR stating the manner of the basis for contesting the default and the manner of the cure; or
- g. if LICENSEE is convicted of a felony relating to the development, manufacture, use, marketing, distribution, or sale of the LICENSED PRODUCTS; or
- h. at any time upon [****] written notice by LICENSEE to LICENSOR, provided that LICENSEE pays to [****] before the expiration of such [****] notice period.

7.3 If this AGREEMENT is terminated for any cause:

- a. nothing herein will be construed to release either party of any obligation matured prior to the effective date of the termination;
- b. after the effective date of the termination, LICENSEE will provide LICENSOR with a written inventory of all LICENSED PRODUCTS in process of manufacture, in use or in stock. LICENSEE may SELL any such LICENSED PRODUCTS following such termination if it pays to LICENSOR earned royalties thereon and any other amount due pursuant to the terms of Article 5; and

c. the parties will be bound by the provisions of Articles 2 (Definitions), 3 (Limitation of Liability), 5 (Payments and Reports), 9 (Assignment), 11 (Indemnification and Insurance), 12 (Use Of Name), 13 (Confidential Information), 15 (Export Control), 16 (Alternate Dispute Resolution), and 17 (General) of this AGREEMENT.

8. INFRINGEMENT BY THIRD PARTIES

8.1 Prosecution of Infringements.

a. [****]. LICENSEE and LICENSOR shall inform each other promptly in writing in the event either party becomes aware of any alleged infringement of the PATENT RIGHTS by a third party and of any available evidence thereof.

b. [****], which shall not be unreasonably withheld or delayed. [****] agrees to [****] for the reasonable [****] incurred [****] in participating in any such proceeding with [****] and providing such assistance to [****].

c. [****] shall promptly notify [****].

8.2 Defense of Infringements.

a. LICENSEE shall, [****] have the first right, but not the obligation, to defend any suits against LICENSEE or SUBLICENSEES alleging infringement of any third party patent right due to the development and/or commercialization of LICENSED PRODUCTS by LICENSEE or any SUBLICENSEE. LICENSEE shall promptly notify LICENSOR in writing of such claims, and LICENSOR shall cooperate with LICENSEE in connection with any such claim at [****]. [****] shall, [****] have the right to join any such legal proceeding and to be represented in any legal proceeding by independent counsel of its choosing. In no event shall [****] have any liability whatsoever for any damages, litigation costs, or other amounts due to any third party (except for costs of [****] own counsel as provided above). If the third party patent right is held not to be infringed or is held unenforceable or invalid, any recovery of damages with respect to such suit shall be distributed to LICENSOR and LICENSEE [****] based upon the [****] amount of monies spent by LICENSOR and LICENSEE [****]. For clarity, the parties agree that this Section 8.2 shall in no way limit LICENSEE's obligations under Section 11.1.

8.3 LICENSEE shall have the right to settle any such claim, at its own expense and subject to LICENSOR's consent, which shall not be unreasonably withheld or delayed.

9. ASSIGNMENT

Except in connection with (i) the assignment of this AGREEMENT to an AFFILIATE, (ii) as part of a sale, regardless of whether such sale occurs through an asset sale, stock sale, merger or other combination, or any other transfer of LICENSEE'S entire business, or (iii) as contemplated in the transactions described in Section 5.2, LICENSEE may not assign this AGREEMENT without the prior written consent of LICENSOR, which will not be unreasonably withheld. Any assignment not complying with the requirements of this Section 9 is void *ab initio*. This AGREEMENT shall be binding upon any successors in interest of LICENSEE.

10. PATENT MARKING

LICENSEE must permanently and legibly mark all products, packaging and documentation manufactured or SOLD by it under this AGREEMENT with a patent notice as may be permitted or required under Title 35, United States Code.

11. INDEMNIFICATION AND INSURANCE

11.1 LICENSEE shall hold harmless, indemnify, and defend LICENSOR and any parent, subsidiary, or other affiliated entity of LICENSOR and their respective trustees, officers, directors, employees, scientists, students, successors, assigns, agents, and other representatives (collectively, the "LICENSOR INDEMNITEES") from and against all damages, liabilities, losses, and other expenses, including reasonable attorney's fees, expert witness fees, and costs incurred by the LICENSOR INDEMNITEES, with respect to any claims, demands, or causes of action whatsoever brought by a third party, whether or not a lawsuit or other proceeding is filed (collectively, "Claims"), arising out of or resulting from, (a) the exercise or practice of the license granted hereunder by LICENSEE and its SUBLICENSEES and AFFILIATES or their officers, employees, agents or representatives; (b) alleged defects or other problems with any of the LICENSED PRODUCTS, LICENSED PROCESSES, or manufactured, sold, distributed, or rendered by or on behalf of LICENSEE or any SUBLICENSEE, including without limitation any personal injuries, death or property damages related thereto, (c) the research, development, manufacture, use, marketing, advertising, distribution, sale or importation of any LICENSED PRODUCT, LICENSED PROCESS, by on or behalf of LICENSEE or any of its SUBLICENSEES, (d) the negligent or willful acts or omissions of LICENSEE or any of its SUBLICENSEES, (e) any allegations that LICENSED PRODUCTS, LICENSED PROCESSES, by or on behalf of LICENSEE or any SUBLICENSEE and/or any trademarks, service marks, logos, symbols, slogans, or other materials used in connection with or to market LICENSED PRODUCTS, LICENSED PROCESSES, violate or infringe upon the trademarks, service marks, trade dress, trade names, copyrights, patents, works of authorship, inventorship rights, trade secrets, database rights, rights under unfair competition laws, rights of publicity, privacy or defamation, or any other intellectual or industrial property right of any third party, (f) LICENSEE's or any AFFILIATE's or SUBLICENSEE's failure to comply with any applicable laws, rules or regulations, and/or (g) LICENSEE's or any AFFILIATE's or SUBLICENSEE's labeling, packaging or patent marking of any LICENSED PRODUCT or containers thereof by or on behalf of LICENSEE or any SUBLICENSEE. LICENSEE shall not enter into any settlement, stipulated judgment or similar arrangement with respect to such Claims that impose any obligation on LICENSOR INDEMNITEES, that does not unconditionally release LICENSOR INDEMNITEES from all liability or that would have an adverse effect on LICENSOR's reputation or business without LICENSOR's prior written consent. Notwithstanding the above, the LICENSOR INDEMNITEES, at their expense, shall have the right to retain separate independent counsel to assist in defending any such Claims. In the event LICENSEE fails to promptly indemnify and defend such Claims or pay LICENSOR INDEMNITEES' expenses as provided above, LICENSOR INDEMNITEES shall have the right, but not the obligation, to defend themselves, and in that case, LICENSEE shall reimburse LICENSOR INDEMNITEES for all their reasonable attorneys' fees, costs, and damages incurred in settling or defending such Claims within [****] of each of the LICENSOR INDEMNITEES' written requests. This indemnity shall be a direct payment obligation and not merely a reimbursement obligation of LICENSEE to LICENSOR INDEMNITEES.

11.2 Beginning at the time when any LICENSED PRODUCT, is being distributed or SOLD (including for the purpose of obtaining regulatory approvals) by LICENSEE or by a SUBLICENSEE, LICENSEE will, at its sole cost and expense, procure and maintain commercial general liability insurance in amounts not less than [****] per incident and [****] annual aggregate. During clinical trials involving any LICENSED PRODUCT, , LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in the same amounts and terms as specified above. LICENSEE's commercial general liability insurance shall provide coverage for clinical trial coverage, product liability, personal injury, broad form property damage, advertising injury, premises-operations, products and completed operations, and contractual liability coverage for LICENSEE's indemnity and other obligations under this AGREEMENT. LICENSEE will have the LICENSOR and LICENSOR INDEMNITEES named as additional insureds on any commercial general liability and product liability insurance policies maintained by LICENSEE, its AFFILIATES, and its SUBLICENSEES. Such commercial general liability insurance will provide (i) product liability coverage; (ii) broad form contractual liability coverage for LICENSEE'S indemnification under this AGREEMENT; and (iii) coverage for litigation costs.

11.3 LICENSEE will provide LICENSOR with written evidence of such insurance upon LICENSOR's request. LICENSEE will provide LICENSOR with written notice of at least 15 days prior to the cancellation, non-renewal or material change in such insurance.

11.4 LICENSEE will maintain such commercial general liability and product liability insurance beyond the expiration or termination of this AGREEMENT during (i) the period that any LICENSED PRODUCT developed pursuant to this AGREEMENT is being commercially distributed or SOLD by or on behalf of a LICENSEE or a SUBLICENSEE; and (ii) a reasonable period of time after the period described in sub-clause (i) above, which in no event shall be less than 10 years.

12. USE OF NAME

LICENSEE may not use the names of LICENSOR without express written consent from LICENSOR except as required by governmental law, rule or regulation. Such names include "The Scripps Research Institute," "Scripps," "TSRI," "Scripps Research," or any variation thereof.

13. CONFIDENTIAL INFORMATION

13.1 The parties agree that all information forwarded to one by the other for the purposes of this AGREEMENT (i) is to be received in strict confidence, (ii) is to be used only for the purposes of this AGREEMENT, and (iii) is not to be disclosed by the recipient party, its agents or employees without the prior written consent of the disclosing party, except to the extent that the recipient party can establish competent written proof that such information:

- a. was in the public domain at the time of disclosure;
- b. later became part of the public domain through no act or omission of the recipient party, its employees, agents, successors or assigns;
- c. was lawfully disclosed to the recipient party by a third party having the right to disclose it;
- d. was already known by the recipient party at the time of disclosure without any obligation of confidentiality, as evidenced by the recipient party's pre-existing written records;
- e. was independently developed by the recipient party, as evidenced by the recipient party's pre-existing or contemporaneous written records; or
- f. is required by law or regulation to be disclosed, provided however, that the disclosing party shall first give the recipient party written notice and adequate opportunity to object to such order for disclosure or to request confidential treatment.

13.2 Information shall not be deemed to be available to the public or to be in the recipient's possession merely because it:

- a. includes information that falls within an area of general knowledge available to the public or to the recipient (i.e., it does not include the specific information provided by the other party); or
- b. can be reconstructed in hindsight from a combination of information from multiple sources that are available to the public or to the recipient, if not one of those sources actually taught or suggested the entire combination, together with its meaning and importance.

13.3 Each party's obligation of confidence hereunder shall be fulfilled by using at least the same degree of care with the other party's confidential information as it uses to protect its own confidential information. This obligation shall exist while this AGREEMENT is in force and for [****].

13.4 LICENSEE agrees that LICENSOR shall have the right to publish in accordance with its general policies and that this AGREEMENT shall not restrict, in any fashion, LICENSOR's right to publish.

13.5 Except as other required by law, no party shall originate or distribute any publication, news release, or other public announcement, written or oral, whether in the public press, stockholders' reports, or otherwise, relating to this AGREEMENT or to any sublicense hereunder, or to the performance hereunder or under any such sublicense agreements without the prior written consent of the other party, which consent shall not be unreasonably withheld. Scientific publications published in accordance with Section 13.4 of this AGREEMENT shall not be construed as publicity governed by this Section 13.5.

13.4 LICENSEE agrees that LICENSOR shall have the right to publish in accordance with its general policies and that this AGREEMENT shall not restrict, in any fashion, LICENSOR's right to publish.

13.5 Except as other required by law, no party shall originate or distribute any publication, news release, or other public announcement, written or oral, whether in the public press, stockholders' reports, or otherwise, relating to this AGREEMENT or to any sublicense hereunder, or to the performance hereunder or under any such sublicense agreements without the prior written consent of the other party, which consent shall not be unreasonably withheld. Scientific publications published in accordance with Section 13.4 of this AGREEMENT shall not be construed as publicity governed by this Section 13.5.

14. PATENT ADMINISTRATION

14.1 From and after the date of this AGREEMENT, the provisions of this Section 14.1 shall control the prosecution of any patent application and maintenance of any patent included within the PATENT RIGHTS. Subject to the requirements, limitations and conditions of this AGREEMENT, [****] and (b) [****], [****] shall select the patent attorney, subject to [****] written approval, which approval shall not be unreasonably withheld. [****] shall have full rights of consultation with [****] and with the patent attorney so selected on all matters relating to the PATENT RIGHTS and [****] has the right to charge [****] fees for any time reviewing patent prosecution documents filed hereunder.

14.2 [****] shall (i) keep [****] informed as to the filing, prosecution and maintenance of patents and patent applications with the PATENT RIGHTS, (ii) furnish to [****] copies of documents relevant to any such filing, prosecution, and maintenance, and (iii) allow [****] reasonable opportunity to comment on documents filed with any patent office which would affect the PATENT RIGHTS or [****] interests thereunder.

14.3 [****] acknowledges and agrees that [****], and that the license granted hereunder is in [****] as described herein. [****] shall pay for [****]. [****] agrees to pay all such expenses directly or to reimburse [****] for the payment of such expenses within [****] after [****] receives an itemized invoice from [****].

14.4 In the event [****] elects to discontinue payment for the [****] within the PATENT RIGHTS, such patent application or patent shall be excluded from the definition of PATENT RIGHTS and from the scope of the license granted hereunder. [****] at least [****] days prior written notice of any such election.

15. EXPORT CONTROL

LICENSEE acknowledges that it is subject to and agrees to abide by the United States laws and regulations (including the Export Administration Act of 1979 and Arms Export Control Act) controlling the export of technical data, computer software, laboratory prototypes, biological material and other commodities. The transfer of such items may require a license from the cognizant agency of the GOVERNMENT or written assurances by LICENSEE that it shall not export such items to certain foreign countries without prior approval of such agency. LICENSEE hereby gives written assurance that it will comply with, and will cause its AFFILIATES and SUBLICENSEES to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its AFFILIATES or SUBLICENSEES, and that it will indemnify and defend LICENSOR (in accordance with Section 11) for the consequences of any such violation. LICENSOR neither represents that a license is or is not required or that, if required, it shall be issued.

16. ALTERNATE DISPUTE RESOLUTION

16.1 Any controversy or claim arising out of or relating to this AGREEMENT, or the breach thereof, or the relationship or activities between the parties (other than patent disputes), shall be first referred to senior management of each party for resolution. If senior management fails to resolve such controversy or claim within 30 days, then such controversy or claim shall be submitted to mediation. The mediator shall be a retired judge or other neutral third party mutually selected by LICENSOR and LICENSEE who has at least ten years' experience in mediating or arbitrating cases in the biopharmaceutical industry and regarding the same or substantially similar subject matter as the dispute between LICENSOR and LICENSEE. If the parties are unable to agree on such mediator within 20 days after they exchange initial lists of potential mediators, a mediator with the same qualifications will be selected by the JAMS office in San Diego located at 401 B Street, San Diego, CA 92101 (after consultation with the parties).

a. The location of the mediation shall be in the county of San Diego, California. LICENSOR and LICENSEE hereby irrevocably submit to the exclusive jurisdiction and venue of the mediator mutually selected by the parties or to the neutral mediator selected by JAMS of San Diego for purposes of the mediation. In the event mediation is unsuccessful as provided in subclause (b) or (c) below, the parties hereby irrevocably submit to the exclusive jurisdiction and venue of the federal and state courts located in San Diego County, California for any action or proceeding regarding this AGREEMENT.

b. If the dispute is not resolved through mediation, either party may refer the dispute to a court of competent jurisdiction in San Diego County, California.

c. Prior to or while a mediation proceeding is pending, either party has the right to seek and obtain injunctive and other equitable relief from a court of competent jurisdiction to enforce that party's rights hereunder.

17. GENERAL

17.1 This AGREEMENT constitutes the entire and only agreement between the parties for PATENT RIGHTS and all other prior negotiations, representations, agreements, and understandings are hereby superseded. No agreements altering or supplementing these terms may be made except by a written document signed by both parties.

17.2 Any payments required by this AGREEMENT to be paid to LICENSOR must be payable to The Scripps Research Institute and sent to:

The Scripps Research Institute

[***]

[***]

[***]

17.3 Any notice required by this AGREEMENT must be given by email or confirmed by personal delivery (including delivery by reputable messenger services such as Federal Express) or by prepaid, first class, certified mail, return receipt requested, addressed in the case of LICENSOR to:

The Scripps Research Institute

[***]

[***]

[***]

or in the case of LICENSEE to:

OPKO Pharmaceuticals, LLC
4400 Biscayne Blvd.
Miami, Florida 33137
ATTENTION: Legal Department
Fax: (305) 575-4140

or other addresses as may be given from time to time under the terms of this notice provision.

17.4 LICENSEE must comply with all applicable national, state and local laws and regulations in connection with its activities pursuant to this AGREEMENT. In addition, LICENSOR requires that all of its suppliers, licensees, partners, subcontractors, distributors, consultants, agents and other parties with whom LICENSOR does business to act at all times in a professional and ethical manner in carrying out their obligations, services, and contractual obligations. To that end, the LICENSEE, any LICENSEE AFFILIATE, and any SUBLICENSEE shall comply with all country, federal, state and local anti-bribery laws, ordinances, codes, regulations, rules, policies and procedures, including, but not limited to, the U.S. Foreign Corrupt Practices Act.

17.5 Failure of any party to enforce a right under this AGREEMENT or at law or in equity will not act as a waiver of that right, unless such waiver is in writing and signed by the waiving party.

17.6 Headings are included herein for convenience only and shall not be used to construe this AGREEMENT.

17.7 If any part of this AGREEMENT is for any reason found to be unenforceable, all other parts nevertheless remain enforceable, and the stricken provision shall be revised in a manner that best reflects the original intent of the parties.

17.8 Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this AGREEMENT for failure or delay in fulfilling or performing any term of this AGREEMENT when such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, including, without limitation, fire, floods, earthquakes, natural disasters, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, or acts, omissions or delays in acting by any governmental authority.

17.9 In the event of a dispute between the parties or any default hereunder, the party prevailing in the resolution of such dispute or default shall be entitled to recover its reasonable attorneys' fees and other costs incurred in connection with resolving such dispute or default in addition to any other relief to which it is entitled.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized representatives to execute this AGREEMENT.

The Scripps Research Institute

OPKO Pharmaceuticals, LLC

By /s/ Matthew Tremblay
Matthew Tremblay
Chief Operating Officer

By /s/ Steven D. Rubin
Steven D. Rubin
Executive Vice President

Date 2/26/19

Date 2/25/19

EXHIBIT A

PATENT RIGHTS

PCT Application filed on October 4, 2018 entitled ARTICLES AND METHODS DIRECTED TO PERSONALIZED THERAPY OF CANCER and priority applications of the same title having Russian Application No. 2017134483 filed October 4, 2017; Russian Application No. 2018112009 filed April 4, 2018 and Russian Application No. 2018134321 filed October 1, 2018 and all applications claiming priority to such filings.

EXHIBIT B

Lock-Up Agreement

Xenetic Biosciences, Inc.
40 Speen Street, Suite 102
Framingham, MA 01701
Attn: Jeffrey F. Eisenberg, Chief Executive Officer

Ladies and Gentlemen:

The Scripps Research Institute, a California, nonprofit public benefit corporation, whose address is 10550 North Torrey Pines Road, La Jolla, California 92037 (“Scripps”) understands that as an inducement to Xenetic Biosciences, Inc. (the “**Buyer**”) to enter into that certain Share Purchase Agreement dated as of February [•], 2019, by and among Buyer, Hesperix SA, a Swiss corporation (the “**Company**”), the owners of the Company parties thereto (the “**Sellers**”), and Alexey Andreevich Vinogradov, as the representative of the Sellers and the transactions contemplated thereby, Scripps hereby enters into this lock-up agreement (this “**Lock-Up Agreement**”) and agrees that Scripps will not, during the period commencing on the date hereof and ending one hundred eighty (180) days after the date hereof (the “**Lock-Up Period**”), (1) 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, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of Buyer or any securities convertible into or exercisable or exchangeable for shares of capital stock of Buyer, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the “**Lock-Up Securities**”); (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Lock-Up Securities, whether any such transaction is to be settled by delivery of shares of Lock-Up Securities, in cash or otherwise; (3) make any demand for or exercise any right with respect to the registration of any Lock-Up Securities; or (4) publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement relating to any Lock-Up Securities. Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer Lock-Up Securities as a *bona fide* gift, by will or intestacy, or to a family member or trust for the benefit of a family member (for purposes of this Lock-Up Agreement, “family member” means any relationship by blood, marriage or adoption, not more remote than first cousin) or as a *bona fide* gift to a charity or educational institution; *provided* that in the case of any such transfer pursuant to the foregoing, (i) any such transfer shall not involve a disposition for value, (ii) each transferee shall sign and deliver to Buyer a lock-up agreement substantially in the form of this Lock-Up Agreement, and (iii) no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made, except for a Form 5. Scripps also agrees and consents to the entry of stop transfer instructions with Buyer’s transfer agent and registrar against the transfer of the undersigned’s Lock-Up Securities, except in compliance with this Lock-Up Agreement.

Scripps understands that this Lock-Up Agreement is irrevocable and shall be binding upon Scripps’ legal representatives, successors, and assigns.

Very truly yours,

The Scripps Research Institute

By: _____
[Name]

Its: _____
[Title]

Exhibit C

CONFIRMATORY ASSIGNMENT

WHEREAS, this CONFIRMATORY ASSIGNMENT (“**Assignment**”) dated as of _____, 2019 (the “Effective Date”), is made by and between OPKO PHARMACEUTICALS, LLC, a limited liability corporation organized under the laws of the state of Delaware, with an office at 4400 Biscayne Boulevard, , FL 33137, USA (“Assignor”) and XENETIC BIOSCIENCES, INC., a corporation organized under the laws of the state of Nevada, with an office at 40 Speen Street, Suite 102, Framingham, MA 01701 (“Assignee”). Hereinafter, Assignor and Assignee will collectively be referred to as the “**Parties**”, or individually as a “**Party**”.

WHEREAS, a certain Intellectual Property License Agreement dated as of or approximately the date hereof (the “IP License Agreement”) was entered into by The Scripps Research Institute, a California public benefit corporation located at 10550 North Torrey Pines Road, La Jolla, CA 92037, USA (“Scripps”) and Assignor regarding certain new and useful inventions entitled “ARTICLES AND METHODS DIRECTED TO PERSONALIZED THERAPY OF CANCER” for which the following patent applications were filed:

RU2017134483 filed Oct. 4, 2017 C1256.70030RU00	RU2018112009 filed Apr. 4, 2018 C1256.70031RU00	RU2018134321 filed Oct. 1, 2018 C1256.70033RU00	PCT/RU2018/000653 filed Oct. 4, 2018 C1256.70030WO00
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(collectively, the “Patents”).

WHEREAS, Assignor and Assignee have entered into that certain Assignment Agreement, dated as of March 1, 2019 (the “Purchase Agreement”); and

WHEREAS, under the terms of the Purchase Agreement, Assignor has conveyed, transferred and assigned to Assignee, the rights and obligations of the Assignor under the IP License Agreement and has agreed to execute and deliver this Assignment Agreement to sell, assign and transfer to Assignee its rights and obligations in the IP License Agreement and for recording with the USPTO.

NOW, THEREFORE, for good and valuable consideration paid by Assignee, including the premises and covenants set forth in the Purchase Agreement, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

Assignor hereby sells, conveys, transfers, assigns, and delivers to Assignee and Assignee hereby acquires and accepts, all of Company's right, title and interest in and to the IP License Agreement, and Assignee agrees to assume, perform and discharge all of the obligations and liabilities of Assignor under the IP License Agreement. Assignor hereby authorizes the Commissioner for Patents in the USPTO to record and register this Assignment Agreement upon request by Assignee.

[Signature Page Follows]

IN TESTIMONY WHEREOF, Assignor and Assignee each has caused this Assignment Agreement to be executed by its respective duly authorized representative as of the Effective Date.

ASSIGNOR:

OPKO PHARMACEUTICALS, LLC

By: _____

Name:

Title:

ASSIGNEE:

XENETIC BIOSCIENCES, INC.

By: _____

Name:

Title:

Schedule 4.03 Brokers

Letter of Engagement between Maxim Group and the Strategic Alternatives Committee of the Board of Directors of Xenetic Biosciences, Inc. dated May 16, 2018.

Schedule 4.06 Buyer SEC Reports

None.

Schedule 4.07 (a) Tax Matters

The following tax returns have not been filed:

Xenetic Biosciences (UK) Ltd 2013, 2014, 2015, 2016 & 2017

Lipoxen technologies, Ltd. 2013, 2014, 2015, 2016 & 2017

NOTE: No tax due for any years as significant tax losses have been incurred within each subsidiary. Minimum payments have been made for both entities.