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

FORM 8-K

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

Date of Report (Date of earliest event reported): **March 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)

**99 Hayden Avenue, Suite 230
Lexington, Massachusetts, 02421**
(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.

Overview

On March 4, 2019, Xenetic Biosciences, Inc. (the “Company”) announced its 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. The XCART technology, developed by The Scripps Research Institute (“Institute”) in collaboration with the Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry (“IBCH”), is believed to have the potential to significantly enhance the safety and efficacy of cell therapy for B-cell lymphomas by generating patient- and tumor-specific CAR T cells.

The XCART technology platform was designed by its originators to utilize an established screening technique to identify peptide ligands that bind specifically to the unique B-cell receptor (“BCR”) on the surface of an individual patient’s malignant tumor cells. The peptide is then inserted into the antigen-binding domain of a CAR, and a subsequent transduction/transfection process is used to engineer the patient’s T cells into a CAR T format which redirects the patient’s T cells to attack the tumor. Essentially, the XCART screening platform is the inverse of a typical CAR T screening protocol wherein libraries of highly specific antibody domains are screened against a given target. In the case of XCART screening, the target is itself an antibody domain, and hence highly specific by its nature. The XCART technology creates the possibility of personalized treatment of lymphomas utilizing a CAR with an antigen-binding domain that should only recognize, and only be recognized by, the unique BCR of a particular patient’s B-cell lymphoma. An expected result for XCART is limited off-tumor toxicities, such as B-cell aplasia. Xenetic’s clinical development program will seek to confirm the early preclinical results, and to demonstrate a more attractive safety profile than existing therapies.

A description of the transaction documents and transactions contemplated thereby are set forth below. Subject to the satisfaction of the closing conditions, the transaction is expected to close in the first half of 2019.

Item 1.01. Entry into a Material Definitive Agreement.

Share Purchase Agreement

On March 1, 2019 (the “Signing Date”), the Company entered into a Share Purchase Agreement (the “Share Purchase Agreement”) with Hesperix SA, a Swiss corporation (“Hesperix”), the owners of Hesperix (each, a “Seller” and collectively, the “Sellers”), and Alexey Andreevich Vinogradov, as the representative of each Seller (the “Sellers’ Representative”), pursuant to which the Company will purchase from Sellers all of the issued and outstanding shares of capital stock (the “Shares”) of Hesperix (the “Transaction”).

Under the terms of the Share Purchase Agreement, the Company will issue to Sellers an aggregate of Four Million Eight Hundred Seventy-Five Thousand (4,875,000) shares of the Company’s common stock (the “Transaction Shares”), regardless of the trading price per share of the Company’s common stock at the time of the closing. In addition, the Share Purchase Agreement contains customary representations and warranties relating to each Seller and about the condition of the Company and Hesperix. The Company expects to issue the Transaction Shares pursuant to a registration statement on Form S-4.

The closing of the Transaction is subject to customary closing conditions as well as conditions regarding (i) the Company having adequate financing to fund future working capital obligations of the Company following the closing and (ii) the Company obtaining necessary and appropriate stockholder approvals, evidencing among other matters, approval of the Share Purchase Agreement and the transactions contemplated thereby, including the issuance of the Transaction Shares (the “Stockholder Approvals”). Subject to the satisfaction of the closing conditions, the Transaction is expected to close in the first half of 2019.

Before the closing of the Share Purchase Agreement, Sellers agreed, and agreed to cause Hesperix and its subsidiaries to, conduct the business of Hesperix and its subsidiaries in the ordinary course of business consistent with past practice and to maintain and preserve the current organization, business, Hesperix intellectual property and franchise of Hesperix and its subsidiaries, and preserve the goodwill and business relationships of Hesperix and its subsidiaries. The Share Purchase Agreement contains additional covenants of the parties, including, among other things, non-competition and non-solicitation restrictions of Sellers in favor of the Company, and covenants regarding allocation of the parties’ taxes after the closing of the Transaction.

Pursuant to the Share Purchase Agreement, the parties may terminate the Share Purchase Agreement if a material breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement of the Share Purchase Agreement has occurred with respect to the other party that has not been cured within ten (10) days of such party's receipt of written notice of such breach or if it becomes apparent that any of the closing conditions will not be fulfilled by July 1, 2019.

The foregoing description of the Share Purchase Agreement, and the transactions contemplated thereby does not purport to be complete and is qualified in its entirety by the terms and conditions of the Share Purchase Agreement, which is attached as Exhibit 2.1 to this report, and is incorporated herein by reference.

As a condition precedent to the closing of the Transaction, Sellers and Sellers' Representative will execute lock-up agreements, pursuant to which, Sellers and Sellers' Representative agree, subject to certain customary exceptions, not to sell, transfer or dispose of any Company capital stock for a period of one hundred eighty (180) days from the closing of the Transaction.

Hesperix Assignment Agreement

On the Signing Date and in connection with the Transaction, Hesperix entered into an assignment agreement (the "Hesperix Assignment Agreement") with the IBCH, PJSC Pharmsynthez ("Pharmsynthez"), and certain other parties thereto (collectively, the "Assignors"), pursuant to which, the Assignors have agreed, among other things, to sell, assign, transfer, and convey unto Hesperix all of their individual right, title, and interest throughout the world in and to patents related to "Articles And Methods Directed To Personalized Therapy Of Cancer," and the related know-how. Hesperix has agreed to pay each of IBCH and Pharmsynthez a royalty rate in the low single digit range based on the net sales of products in each country in which, in absence of the Hesperix Assignment Agreement, the manufacture, use, offer for sale, sale, or importation of such product would infringe a valid claim of a patent.

In furtherance of the transactions contemplated by the Hesperix Assignment Agreement, the parties have agreed to reallocate the ownership of all the issued and outstanding shares of Hesperix in all classes, whether by issuance of additional shares or otherwise, in which Alexander Gabibovich Gabibov, Alexey Vyacheslavovich Stepanov, Ivan Vitalievich Smirnov, Alexey Antolievich Belogurov, Dmitry Dmitrievich Genkin, Alexey Vinogradov, and Richard A. Lerner will receive all of the issued and outstanding shares of Hesperix, which Hesperix shares will be exchanged pro rata and on a one for one basis for the Transactions Shares upon closing of the Transaction.

This description of the Hesperix Assignment Agreement does not purport to be complete and is qualified in its entirety by the terms and conditions of the Hesperix Assignment Agreement, which is attached as Exhibit A to the Share Purchase Agreement and is incorporated herein by reference.

OPKO Assignment Agreement and License Agreement

On the Signing Date, the Company entered into an assignment agreement (the "OPKO Assignment Agreement") with OPKO Pharmaceuticals, LLC ("OPKO"), pursuant to which the Company will acquire and accept, all of OPKO's right, title and interest in and to that certain Intellectual Property License Agreement (the "IP License Agreement"), entered into between the Institute and OPKO regarding certain patents related to "Articles And Methods Directed To Personalized Therapy Of Cancer" and which the Institute agreed to grant an exclusive royalty-bearing license, to the patent rights owned by the Institute to OPKO and OPKO has agreed to pay the Institute a royalty rate in the low single digit range based on the net sales of products in each country in which, in absence of the IP License Agreement, the manufacture, use, offer for sale, sale, or importation of such product would infringe a valid claim of a patent or pending application.

Under the terms of the OPKO Assignment Agreement and the IP License Agreement, the Company will issue to OPKO One Million Nine Hundred Sixty-Eight Thousand Seven Hundred Fifty (1,968,750) shares of the Company's common stock (the "OPKO Transaction Shares") and to the Institute Six Hundred Fifty-Six Thousand Two Hundred Fifty (656,250) shares of the Company's common stock (the "Institute Transaction Shares") regardless of the trading price per share of the Company's common stock at the time of the closing. In addition, the OPKO Assignment Agreement contains customary representations and warranties relating to OPKO and the IP License Agreement.

Before the closing of the OPKO Assignment Agreement, OPKO and its subsidiaries agree to (i) maintain and preserve intact the IP License Agreement and its intellectual property (without any amendments thereto or modifications thereof); (ii) pay any obligations under the IP License Agreement; (iii) defend and protect its properties and assets relating to the IP License Agreement and its intellectual property from infringement; and (iv) comply in all material respect with applicable laws relating to the IP License Agreement and its intellectual property.

OPKO and the Institute have agreed to execute lock-up agreements in favor of the Company, which will restrict such recipient's sale or transfer of any of the OPKO and Institute Transaction Shares ultimately received by such recipient as provided therein and as otherwise required by law.

Pursuant to the OPKO Assignment Agreement, the parties may terminate the OPKO Assignment Agreement if a material breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement of the OPKO Assignment Agreement has occurred with respect to the other party that has not been cured within ten (10) days of such party's receipt of written notice of such breach or if it becomes apparent that any of the closing conditions will not be fulfilled by July 1, 2019. The Company expects to issue the OPKO and Institute Transaction Shares pursuant to Section 4(a)(2) under the Securities Act of 1933, as amended, as a transaction not involving a public offering.

The foregoing description of the OPKO Assignment Agreement, and the transactions contemplated thereby does not purport to be complete and is qualified in its entirety by the terms and conditions of the OPKO Assignment Agreement, which is attached as Exhibit 10.1 to this report, and is incorporated herein by reference.

Voting Agreement

On the Signing Date, and as a condition precedent to each of the Share Purchase Agreement and the Hesperix Assignment Agreement, each of Pharmsynthez, and Dr. Dmitry Genkin (each, a "Xenetic Stockholder"), entered into a voting agreement (the "Voting Agreements") with the Company, pursuant to which, each such Xenetic Stockholder and/or its affiliate agreed among other matters to vote such Xenetic Stockholder's and/or its affiliate's respective ownership in the Company in favor of the transactions contemplated by the Share Purchase Agreement at the Company's stockholders' meeting to obtain the Stockholder Approvals. The Voting Agreements will terminate upon the earlier to occur of (a) the closing of the transactions contemplated by the Share Purchase Agreement, (b) such date and time as the Share Purchase Agreement shall be terminated pursuant to the terms thereof or otherwise, or (c) upon mutual written agreement of the Company and each Xenetic Stockholder.

In connection with the OPKO Assignment Agreement, OPKO entered into a voting agreement with the Company (the "OPKO Voting Agreement"), pursuant to which OPKO agreed, among other things, to vote its shares in the Company in favor of the transactions contemplated by the OPKO Assignment Agreement. The OPKO Voting Agreement will terminate upon the earlier to occur of (a) the closing of the transactions contemplated by the OPKO Assignment Agreement, (b) such date and time as the OPKO Assignment shall be terminated pursuant to the terms thereof or otherwise, or (c) upon mutual written agreement of the Company and OPKO.

This descriptions of the Voting Agreements and the OPKO Voting Agreement do not purport to be complete and are qualified in their entirety by the terms and conditions of the Voting Agreements and the OPKO Voting Agreement, which are attached as Exhibit 10.2, 10.3, and 10.4 to this report and are incorporated herein by reference.

Relationships Among the Parties

Pharmsynthez is the Company's largest and controlling stockholder with ownership of approximately 57.1% of the Company's issued and outstanding common stock. Pharmsynthez's ownership of Company common stock does not include approximately 1.0 million shares of common stock issuable upon the conversion of our Series A Preferred Stock, approximately 1.5 million shares of common stock issuable upon the conversion of our Series B Preferred Stock, or approximately 2.5 million shares issuable upon the exercise of outstanding warrants. Dr. Genkin is a director of the Company and serves as the Executive Chairman of Pharmsynthez. Another of our directors, Mr. Knyazev, is also a director of Pharmsynthez. One of our executive officers, Dr. Curtis Lockshin, is an officer of a wholly-owned subsidiary of Pharmsynthez.

OPKO is a wholly-owned subsidiary of OPKO Health, Inc. ("OPKO Health"). OPKO Health owns approximately 4.3% of the Company's issued and outstanding common stock. OPKO Health's ownership of Company common stock does not include approximately 0.3 million shares of common stock issuable upon the conversion of our Series B Preferred Stock and approximately 0.5 million shares issuable upon the exercise of outstanding warrants. A director of the Company, Adam Logal, is the Senior Vice President and Chief Financial Officer of OPKO Health. OPKO Health. also owns approximately 9.0% of the issued and outstanding stock of Pharmsynthez.

ADDITIONAL INFORMATION AND WHERE TO FIND IT

In connection with the Transaction, the Company will file with the Securities and Exchange Commission (the "SEC"), a registration statement on Form S-4 that will include a combined 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 WHEN THEY BECOME AVAILABLE, 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 WILL 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 will also be able to 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, 2017, which was filed with the SEC on March 30, 2018, its Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018, and September 30, 2018, which were filed with the SEC on May 15, 2018, August 10, 2018, and November 9, 2018, respectively, and certain of its Current Reports filed on Form 8-K. These documents can be obtained free of charge from the sources indicated above.

FORWARD-LOOKING STATEMENTS

This Form 8-K contains forward-looking statements for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements contained in this Form 8-K other than statements of historical facts may constitute forward-looking statements within the meaning of the federal securities laws. These statements can be identified by words such as "expects," "plans," "projects," "will," "may," "anticipates," "believes," "should," "intends," "estimates," and other words of similar meaning. Any forward-looking statements contained herein are based on current expectations, and are subject to a number of risks and uncertainties. These forward-looking statements include, but are not limited to, statements regarding the Transaction and development of the CAR T technology. Many factors could cause our actual activities or results to differ materially from the activities and results anticipated in forward-looking statements. Important factors that could cause actual results to differ materially from such plans, estimates or expectations include, among others, (1) that one or more closing conditions to the Transaction, including certain regulatory approvals, may not be satisfied or waived, on a timely basis or otherwise, or that the required approval by the stockholders of the Company may not be obtained; (2) the condition that the Company have adequate financing to fund its future working capital obligations may not be met; (3) the risk that the Transaction may not be completed on the terms or in the time frame expected by the Company, or at all; (4) unexpected costs, charges or expenses resulting from the Transaction; (5) uncertainty of the expected financial performance of the Company following completion of the Transaction; (6) failure to realize the anticipated benefits of the Transaction; (7) the ability of the Company to implement its business strategy; (8) the occurrence of any event that could give rise to termination of the Transaction; and (9) other risk factors as detailed from time to time in the Company's reports filed with the SEC, including its annual report on Form 10-K, periodic quarterly reports on Form 10-Q, periodic current reports on Form 8-K and other documents filed with the SEC. The foregoing list of important factors is not exclusive. In addition, forward-looking statements may also be adversely affected by general market factors, competitive product development, product availability, federal and state regulations and legislation, the regulatory process for new product candidates and indications, manufacturing issues that may arise, patent positions and litigation, among other factors. The forward-looking statements contained in this Form 8-K speak only as of the date the statements were made, and the Company does not undertake any obligation to update forward-looking statements, except as required by law.

Item 3.02. Unregistered Sales of Equity Securities.

The information in Item 1.01 above is incorporated into this Item 3.02 by reference.

Item 8.01. Other Events.

On March 4, 2019, the Company issued a press release announcing the Transaction. A copy of the press release is attached as Exhibit 99.1 to this report and is incorporated herein by reference. Also attached to this report as Exhibit 99.2 is a current corporate presentation, which is incorporated herein by reference. The press release and corporate presentation include additional information about the Transaction and business updates regarding the Company, including a discussion of our closing of enrollment on our XBIO-101 Phase 2 trial.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
2.1	<u>Share Purchase Agreement*†</u>
10.1	<u>OPKO Assignment Agreement</u>
10.2	<u>Voting Agreement – Pharmsynthez</u>
10.3	<u>Voting Agreement – OPKO</u>
10.4	<u>Voting Agreement – Dr. Genkin</u>
99.1	<u>Press release dated March 4, 2019</u>
99.2	<u>Corporate Presentation</u>

* 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.

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: March 4, 2019

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

SHARE PURCHASE AGREEMENT

between

XENETIC BIOSCIENCES, INC.,

HESPERIX SA,

SELLERS SET FORTH ON THE SIGNATURE PAGE HERETO.

and

ALEXEY ANDREEVICH VINOGRADOV, AS REPRESENTATIVE OF SELLERS

dated as of

March 1, 2019

TABLE OF CONTENTS

ARTICLE I	DEFINITIONS	1
ARTICLE II	PURCHASE AND SALE; PURCHASE PRICE; SELLERS' REPRESENTATIVE; CLOSING; TAX TREATMENT	10
Section 2.01	Purchase and Sale	10
Section 2.02	Purchase Price and Other Consideration	10
Section 2.03	Transactions to be Effected at the Closing	10
Section 2.04	Closing	11
Section 2.05	Tax Treatment	11
Section 2.06	Withholding Tax	11
Section 2.07	Appointment of Sellers' Representative	12
ARTICLE III	REPRESENTATIONS AND WARRANTIES OF SELLERS	14
Section 3.01	Organization and Authority of Sellers	14
Section 3.02	Conflicts; Approvals of Third Parties	14
Section 3.03	The Shares	15
Section 3.04	Brokers Fees	15
ARTICLE IV	REPRESENTATIONS AND WARRANTIES OF THE COMPANY	15
Section 4.01	Organization, Authority and Qualification of the Company	15
Section 4.02	Capitalization	16
Section 4.03	Subsidiaries	16
Section 4.04	No Conflicts; Approvals	17
Section 4.05	Financial Statements	17
Section 4.06	No Activities and No Liabilities	17
Section 4.07	Absence of Certain Changes, Events and Conditions	18
Section 4.08	Material Contracts	19
Section 4.09	Intellectual Property	20
Section 4.10	Regulatory Compliance	22
Section 4.11	Legal Proceedings; Governmental Orders	24

Section 4.12	Compliance With Laws; Permits	24
Section 4.13	Taxes	24
Section 4.14	Books and Records	26
Section 4.15	Brokers	26
Section 4.16	Related Party Transactions	26
Section 4.17	Full Disclosure	27
Section 4.18	Independent Investigation	27
ARTICLE V	REPRESENTATIONS AND WARRANTIES OF BUYER	27
Section 5.01	Organization and Authority of Buyer	27
Section 5.02	No Conflicts; Approvals	28
Section 5.03	Brokers	28
Section 5.04	Legal Proceedings	28
Section 5.05	Issuance of Transaction Shares	28
Section 5.06	Buyer SEC Reports; Financial Statements	29
Section 5.07	Tax Matters	29
Section 5.08	Independent Investigation	29
ARTICLE VI	COVENANTS	30
Section 6.01	Conduct of Business Prior to the Closing	30
Section 6.02	Access to Information	31
Section 6.03	No Solicitation of Other Bids	31
Section 6.04	Notice of Certain Events	32
Section 6.05	Resignations and Appointments	32
Section 6.06	Confidentiality	33
Section 6.07	Non-competition; Non-solicitation	33
Section 6.08	Governmental Approvals and Consents	35
Section 6.09	Books and Records	35
Section 6.10	IP Development	36
Section 6.11	Road Shows	36
Section 6.12	Closing Conditions	36
Section 6.13	Stockholders' Meeting; Buyer Domestication	36
Section 6.14	Transaction Filings	37

Section 6.15	Listing Application	38
Section 6.16	Public Announcements	38
Section 6.17	Further Assurances	38
Section 6.18	No Termination of Assignment and Royalty Agreement	38
ARTICLE VII TAX MATTERS		39
Section 7.01	Tax Covenants	39
Section 7.02	Termination of Existing Tax Sharing Agreements	40
Section 7.03	Tax Indemnification	40
Section 7.04	Straddle Period	40
Section 7.05	Contests	40
Section 7.06	Cooperation and Exchange of Information	41
Section 7.07	Tax Refunds	41
Section 7.08	Extraordinary Transactions	41
Section 7.09	Tax Treatment of Indemnification Payments	41
Section 7.10	Survival	41
Section 7.11	Overlap	41
ARTICLE VIII CONDITIONS TO CLOSING		42
Section 8.01	Conditions to Obligations of All Parties	42
Section 8.02	Conditions to Obligations of Buyer	42
Section 8.03	Conditions to Obligations of the Company and each Seller	44
ARTICLE IX INDEMNIFICATION		45
Section 9.01	Survival	45
Section 9.02	Indemnification By Sellers	45
Section 9.03	Indemnification By Buyer	46
Section 9.04	Certain Limitations	46
Section 9.05	Indemnification Procedures	47
Section 9.06	Payments	49
Section 9.07	Set-Off	49
Section 9.08	Exclusive Remedies	49

ARTICLE X	TERMINATION	50
Section 10.01	Termination	50
Section 10.02	Effect of Termination	51
ARTICLE XI	MISCELLANEOUS	51
Section 11.01	Expenses	51
Section 11.02	Notices	51
Section 11.03	Interpretation	52
Section 11.04	Headings	52
Section 11.05	Severability	53
Section 11.06	Entire Agreement	53
Section 11.07	Successors and Assigns	53
Section 11.08	No Third-party Beneficiaries	53
Section 11.09	Amendment and Modification; Waiver	53
Section 11.10	Governing Law; Submission to Jurisdiction; Waiver of Jury Trial	54
Section 11.11	Specific Performance	55
Section 11.12	Prevailing Party Fees	55
Section 11.13	Counterparts	55

SHARE PURCHASE AGREEMENT

This SHARE PURCHASE AGREEMENT (this “**Agreement**”), dated as of March 1, 2019, is entered into between Xenetic Biosciences, Inc., a Nevada corporation (“**Buyer**”), Hesperix SA, a Swiss corporation (the “**Company**”), those owners of the Company set forth on the signature page hereto (each, a “**Seller**” and collectively, the “**Sellers**”), and Alexey Andreevich Vinogradov, as the representative of each Seller as more fully described herein (the “**Sellers’ Representative**”). Buyer, the Company, Sellers, and the Sellers' Representative 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, Sellers own all of the issued and outstanding shares of capital stock (the “**Shares**”) of the Company;

WHEREAS, Sellers wish to sell to Buyer, and Buyer wishes to purchase from Sellers the Shares, subject to the terms and conditions set forth herein;

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

WHEREAS, simultaneously with this transaction, Opko Pharmaceuticals, LLC ("Opko") and Buyer are entering into that certain Assignment Agreement on the date hereof (the "**Opko Assignment Agreement** ") to assign that certain Intellectual Property License Agreement by and among Scripps and Opko (the "**Opko Scripps License Agreement**"); and

WHEREAS, the acquisition of the Shares by Buyer in exchange for the Transaction Shares (as defined herein) will be a taxable transaction for United States federal tax purposes;

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**:

“**Acquisition Proposal**” has the meaning set forth in **Section 6.03(a)**.

“**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.

“**Assignment and Royalty Agreement**” means that certain Assignment Agreement entered into between the Sellers and the Company prior to or simultaneously with the execution hereof to assign the Company Intellectual Property from such Sellers to the Company in the form attached hereto as Exhibit A to this Agreement, and document the payment of certain running royalties by the Company relating solely to the Company Intellectual Property acquired hereunder.

“**Audited Financial Statements**” has the meaning set forth in **Section 4.05**.

“**Authorized Action**” has the meaning set forth in **Section 2.07(d)**.

“**Balance Sheet**” has the meaning set forth in **Section 4.05**.

“**Balance Sheet Date**” has the meaning set forth in **Section 4.05**.

“**Basket**” has the meaning set forth in **Section 9.04(a)**.

“**Books and Records**” means all books and records of the Company and its Subsidiaries, 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).

“**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 6.13(a)**.

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

“**Buyer Financing**” has the meaning set forth in **Section 8.02(g)**.

“**Buyer Indemnities**” has the meaning set forth in **Section 9.02**.

“**Call Notice**” has the meaning set forth in **Section 9.07**.

“**Call Option**” has the meaning set forth in **Section 9.07**.

“**Cap**” has the meaning set forth in **Section 9.04(a)**.

“**Certificate of Domestication**” has the meaning set forth in **Section 6.13(d)**.

“**Change of Control Payment**” or “**Change of Control Payments**” means any severance payment or any other payment, or increase in the amount of compensation (including, without limitation, the acceleration of the time of any payment, funding or vesting) due to any current or former manager, officer, employee, independent contractor or consultant of the Company or any Subsidiary in connection with any of the transactions contemplated by this Agreement or the execution of this Agreement.

“**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 Sellers hereunder.

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

“**Collateral Source**” has the meaning set forth in **Section 9.07**.

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

“**Company Indebtedness**” means, with respect to the Company and its Subsidiaries, (a) the principal, accreted value, accrued and unpaid interest, prepayment and redemption premiums and penalties (if any), unpaid fees and expenses and other monetary obligations in respect of (i) all outstanding indebtedness of the Company and/or its Subsidiaries for borrowed money, (ii) all outstanding indebtedness evidenced by notes, debentures, bonds or other similar instruments issued the Company and/or its Subsidiaries or the payment of which the Company and/or its Subsidiaries are responsible or liable, and (iii) all outstanding indebtedness of the Company and/or its Subsidiaries secured by any Encumbrance on any property owned by the Company and/or its Subsidiaries; (b) all outstanding obligations of the Company and/or its Subsidiaries for the deferred purchase price of property or services, including any earn out obligation, all conditional sale obligations of the Company and/or its Subsidiaries and all obligations of the Company and/or its Subsidiaries under any title retention agreement (but excluding current (i.e. not past due) trade accounts payable); (c) all outstanding obligations of the Company and/or its Subsidiaries under any financing lease or any lease required to be capitalized in accordance with IFRS; (d) all outstanding obligations of the Company and/or its Subsidiaries for the reimbursement of any obligor on any letter of credit, banker’s acceptance, surety bond or similar transaction (but only to the extent such letter of credit, banker’s acceptance, surety bond or similar transaction has actually been drawn); (e) all outstanding obligations of the Company and/or its Subsidiaries under interest rate or currency swap or other hedging transactions or agreements (valued at the termination value thereof); (f) all outstanding obligations of the Company and/or its Subsidiaries under customer credits or advances or with respect to deferred revenue;

(g) all bonuses and other like compensation (including any employer-paid portion of any employment or payroll Taxes related thereto) owed to any employee under existing compensation plans or other arrangements of the Company and/or its Subsidiaries attributable to any period prior to the Closing Date, (h) all outstanding obligations of the Company with respect to employee vacation for the pre-Closing period, (i) all severance or bonus plans or arrangements, Change of Control Payments, or similar arrangements payable as a result of the consummation of the transactions contemplated hereby, (j) all amounts owed on the Company's and/or its Subsidiaries' corporate credit accounts that are "due in full" charges (i.e. are not payable over time) and that are not past due; (k) all obligations of the type referred to in clauses (a) through (j) of any third Person of which the Company and/or its Subsidiaries are responsible or liable, directly or indirectly, as obligor, guarantor, surety or otherwise; and (l) all obligations of the type referred to in clauses (a) through (k) of any third Person secured by (or for which the holder of such obligations has an existing right, contingent or otherwise, to be secured by) any Encumbrance on any property or asset of the Company and/or its Subsidiaries (whether or not such obligation is assumed by the Company and/or its Subsidiaries). Notwithstanding the foregoing, any amounts outstanding under that certain Loan Contract, effective as of November 21, 2018, between Dmitry Genkin and the Company shall not constitute Company Indebtedness and the amount actually advanced thereunder in an amount not to exceed \$150,000 shall be discharged by Buyer at the Closing.

"Company Intellectual Property" means the Company Patents and the Company Know-How.

"Company Know-How" means the names of the vendors that are contemplated by the Company to carry out the development of the inventions claimed in the Patents.

"Company Patents" means the patent applications listed in Schedule 1 and all of the rights appurtenant thereto including all foreign counterparts thereof and all priority applications thereof.

"Company Transaction Expenses" means the fees and expenses incurred as of or prior to the Closing Date by any inventors or scientists who developed the Company Intellectual Property or on behalf of Sellers or the Company or its Subsidiaries payable to any party relating to or arising out of the negotiation, execution or delivery of this Agreement or the consummation of the transactions contemplated hereby, including, without limitation, assignments of Company Intellectual Property to the Company and related agreements pursuant to which the Company acquired the underlying Company Intellectual Property, travel, legal, accounting, success bonuses, investment banking and other professional fees (it being understood that all such fees and expenses shall be the obligation of and payable by the Sellers prior to or at Closing).

"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 6.13(a)**.

"Direct Claim" has the meaning set forth in **Section 9.05(b)**.

“**Disclosure Schedules**” means the Disclosure Schedules delivered by Sellers and 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.

“**Fairness Opinion**” means the opinion from the Buyer’s investment banking firm or other valuation expert delivered to the Buyer Board supporting the valuation of the Purchase Price and any other consideration payable hereunder.

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

“**Financial Statements**” has the meaning set forth in **Section 4.05**.

“**Fundamental Representations**” has the meaning set forth in **Section 9.01**.

“**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.

“**IBCH**” means the Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences.

“**IFRS**” means Internal Financial Reporting Standards consistently applied, as in effect from time to time.

“**Indemnification Exclusions**” has the meaning set forth in **Section 9.04(c)**.

“**Indemnified Party**” has the meaning set forth in **Section 9.05**.

“**Indemnifying Party**” has the meaning set forth in **Section 9.05**.

“**Independent Accountant**” means RSM LLP.

“**Intellectual Property Licenses**” has the meaning set forth in **Section 4.09(f)**.

“**Interim Balance Sheet**” has the meaning set forth in **Section 4.05**.

“**Interim Balance Sheet Date**” has the meaning set forth in **Section 4.05**.

“**Interim Financial Statements**” has the meaning set forth in **Section 4.05**.

“**Knowledge**” means the actual knowledge of such person or any director, managing member, manager, or officer of such person, if applicable, or the knowledge that such Person would have reasonably obtained in the due exercise of care in the performance of their duties to such person without having made any search or investigation.

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

“**Liabilities**” has the meaning set forth in **Section 4.06**.

“**Licensed Intellectual Property**” has the meaning set forth in **Section 1.01(a)**.

“**Lock-Up Agreement**” means that certain Lock-Up Agreement to be executed by each Seller or other Affiliate recipient of the Transaction Shares, as the case may be, in favor of Buyer in the form attached hereto as Exhibit B (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) the business, results of operations, condition (financial or otherwise) or assets of the Company and/or any of its Subsidiaries, or (b) the ability of Sellers 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 and/or any of its Subsidiaries 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, including without limitation IFRS; *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 and/or any of its Subsidiaries compared to other participants in the industries in which the Company and/or any of its Subsidiaries conduct their respective businesses.

“**Material Contracts**” has the meaning set forth in **Section 4.08(a)**.

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

“**New Buyer Bylaws**” has the meaning set forth in **Section 6.13(d)**.

“**New Buyer Charter**” has the meaning set forth in **Section 6.13(d)**.

“**Non-Fundamental Survival Period**” has the meaning set forth in **Section 9.01**.

“**NRS**” has the meaning set forth in **Section 5.02**.

“**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.

“**Owned Intellectual Property**” has the meaning set forth in **Section 1.01(a)**.

“**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.

“**Personal Information**” has the meaning set forth in **Section 4.10(f)**.

“**Post-Closing Tax Period**” means any taxable period beginning after the Closing Date and, with respect to any Straddle Period, the portion of such taxable period beginning after the Closing Date.

“**Post-Closing Taxes**” means Taxes of the Company and its Subsidiaries for any Post-Closing Tax Period.

“**Pre-Closing Tax Period**” means any taxable period of the Company and its Subsidiaries ending on or before the Closing Date and, with respect to any Straddle Period, the portion of such taxable period ending on or before the Closing Date.

“**Pre-Closing Taxes**” means Taxes of the Company and its Subsidiaries for any Pre-Closing Tax Period.

“**Preliminary Proxy Statement**” has the meaning set forth in **Section 6.13(a)**.

“**Processing Agreement**” has the meaning set forth in **Section 4.10(f)**.

“**Proxy Statement**” has the meaning set forth in **Section 6.13(a)**.

“**Pro Rata Share**” means a Seller’s ownership interest in the Company as set forth opposite such Seller’s name on Schedule I.

“**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.

“**Restricted Business**” means the invention, development, use or commercialization of a process or product covered by any claim as filed of the Company Patents. Buyer acknowledges that Restricted Business does not include basic research directed toward increasing knowledge in science or a fuller knowledge or understanding of the subject under study.

“**Restricted Period**” has the meaning set forth in **Section 6.07(a)**.

“**Scripps**” means The Scripps Research Institute, a California public benefit corporation.

“**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.

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

“**Seller Indemnitees**” has the meaning set forth in **Section 9.03**.

“**Sellers’ Representative**” has the meaning set forth in the preamble.

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

“**Sponsored Research Agreement**” means that certain Sponsored Research Agreement to be executed by Buyer and IBCH at Closing to fund certain other CAR T Technology research at IBCH following the Closing as identified therein (other than the Company Intellectual Property being acquired hereunder), subject to the terms and conditions set forth therein as agreed to by the parties hereto.

“**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 6.13(a)**.

“**Stockholders’ Meeting**” has the meaning set forth in **Section 6.13(a)**.

“**Straddle Period**” has the meaning set forth in **Section 7.04**.

“**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.

“**Tax Claim**” has the meaning set forth in **Section 7.05**.

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

“**Territory**” means worldwide.

“**Third Party Claim**” has the meaning set forth in **Section 9.05(a)**.

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

“**Transaction Filings**” has the meaning set forth in **Section 6.14**.

“**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

Purchase and sale; purchase price; Sellers' representative; closing; tax treatment

Section 2.01 Purchase and Sale. Subject to the terms and conditions set forth herein, at the Closing, each Seller shall sell to Buyer, free and clear of all Encumbrances, and Buyer shall purchase from each Seller, all of the Shares owned by each such them, free and clear of all Encumbrances, for the consideration specified in **Section 2.02**. The Parties hereto acknowledge and agree that, at or prior to the Closing, the Sellers shall have paid all Company Transaction Expenses and the Company shall be acquired on a cash-free basis with no Company Indebtedness (or all Company Indebtedness discharged or paid for by the Company or the Sellers prior to or at the Closing). For the avoidance of doubt, all amounts outstanding under that certain Loan Contract, effective as of November 21, 2018, between Dmitry Genkin and the Company shall not constitute Company Indebtedness and the amount actually advanced thereunder in an amount not to exceed \$150,000 shall be discharged by Buyer at Closing.

Section 2.02 Purchase Price and Other Consideration. The aggregate purchase price for the Shares shall be Four Million Eight Hundred Seventy Five Thousand (4,875,000) 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.

Section 2.03 Transactions to be Effected at the Closing.

- (a) At the Closing, Buyer shall deliver to Sellers' Representative:
- (i) the Transaction Shares, in the amounts and to the Persons set forth on **Section 2.03(a)(i)** of the Disclosure Schedules;
 - (ii) all other agreements, documents, instruments or certificates required to be delivered by Buyer at or prior to the Closing pursuant to **Section 8.03** of this Agreement.
- (b) At the Closing, Sellers' Representative shall deliver or shall cause to be delivered to Buyer:
- (i) certificates representing the Shares (to the extent represented by certificates), duly endorsed in favor of Buyer or accompanied by separate stock powers duly executed by each registered holder of such Shares;
 - (ii) the Lock-Up Agreement, duly executed by each of the Sellers;
 - (iii) a Stockholder's Agreement in substantially the form attached hereto as Exhibit C, pursuant to which certain stockholders of the Company have agreed to vote or cause to be voted, or consent or cause to be consented, with respect to the election of directors, whether such matter is brought before any meeting of the stockholders of the Company however called, proposed to be taken by written consent of the stockholders of the Company or otherwise, all of the shares of the Company's common stock owned or held by the stockholders, directly or indirectly, in accordance with the recommendations or directions of the Company's board of directors; and

(iv) all other agreements, documents, instruments or certificates required to be delivered by Seller at or prior to the Closing pursuant to **Section 8.02** of this Agreement.

Section 2.04 Closing. Subject to the terms and conditions of this Agreement, the purchase and sale of the Shares 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 VIII** 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 acquisition of the Shares 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 Sellers hereunder and. Buyer shall promptly provide the Sellers’ Representative with written notice of its intent to deduct and withhold, and Buyer shall reasonably cooperate with the Sellers’ Representative to eliminate or reduce the basis for such deduction or withholding (including by providing the Sellers’ Representative with a reasonable opportunity to provide forms or other evidence that would exempt such amounts from withholding). Buyer shall promptly provide the Sellers’ Representative with any applicable receipts for payments remitted to a Governmental Authority pursuant to this Section 2.06.

Section 2.07 Appointment of Sellers' Representative.

(a) Irrevocable Power of Attorney. Each Seller irrevocably constitutes and appoints Alexey Andreevich Vinogradov as the Sellers' Representative, with full and unqualified power to delegate to one or more Persons the authority granted to such Sellers' Representative hereunder, to act as such Person's true and lawful attorney-in-fact and agent, with full power of substitution, and authorizes the Sellers' Representative acting for such Person and in such Person's name, place and stead, in any and all capacities to do and perform every act and thing required or permitted to be done in connection with the transactions contemplated by this Agreement and the other Transaction Documents, as fully to all intents and purposes as such Person might or could do in person, including, without limitation:

(i) to take any and all action on behalf of such Seller from time to time as Sellers' Representative may deem necessary or desirable to fulfill the interests and purposes of this Agreement and the other Transaction Documents and to engage agents and Representatives to assist in connection therewith;

(ii) to deliver all notices required to be delivered by such Seller or any of them;

(iii) to receive all notices required to be delivered to such Seller or any of them;

(iv) to give such orders and instructions as Sellers' Representative in its sole discretion shall determine with respect to this Agreement and the other Transaction Documents and the transactions contemplated hereby and thereby;

(v) to take all actions necessary to handle and resolve claims by or against Buyer for indemnification by such Seller under this Agreement;

(vi) to retain and to pay legal counsel and other professionals in connection with any and all matters referred to herein or relating hereto or any other Transaction Documents (which counsel or other professionals may, but need not, be counsel or other professionals engaged by the Company);

(vii) to make, acknowledge, verify and file on behalf of any such Seller applications, Approvals to service of process and such other documents, undertakings or reports as may be required by Law as determined by Sellers' Representative in his sole discretion after consultation with counsel; and

(viii) to make, exchange, acknowledge, deliver, amend and terminate all such other contracts, powers of attorney, orders, receipts, notices, requests, instructions, certificates, letters and other writings, and in general to do all things and to take all actions, that Sellers' Representative in his sole discretion may consider necessary or proper in connection with or to carry out the aforesaid, as fully as could such Seller if personally present and acting.

(b) Power of Attorney. Each Seller hereby irrevocably grants unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing necessary or desirable to be done in connection with the matters described above, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that Sellers' Representative may lawfully do or cause to be done by virtue hereof. Each of such Seller further agrees not to take any action inconsistent with the terms of this **Section 2.07** or with the actions (or decisions not to act) of Sellers' Representative hereunder, and in any case shall not take any action or other position under this Agreement without the consent of Sellers' Representative. To the extent of any inconsistency between the actions (or decisions not to act) of Sellers' Representative and of any such Seller hereunder, the actions (or decisions not to act) of Sellers' Representative shall control. EACH SELLER ACKNOWLEDGES THAT IT IS HIS OR ITS EXPRESS INTENTION TO HEREBY GRANT A DURABLE POWER OF ATTORNEY IN FAVOR OF SELLERS' REPRESENTATIVE AND THAT THIS DURABLE POWER OF ATTORNEY IS NOT AFFECTED BY SUBSEQUENT INCAPACITY OF SUCH SELLER. Each Seller further acknowledges and agrees that upon execution of this Agreement, any delivery by Sellers' Representative of any waiver, amendment, agreement, opinion, certificate or other documents executed by Sellers' Representative pursuant to this **Section 2.07**, such Seller shall be bound by such documents as fully as if such Seller had executed and delivered such documents, and any action (or decision not to act) taken or otherwise implemented by Sellers' Representative under this Agreement shall be binding upon all Sellers.

(c) Liability of the Representative. Sellers' Representative shall not be liable to any Seller for any action taken or omitted by him hereunder or under any other document executed or delivered hereunder, or in connection therewith, except that the Sellers' Representative shall not be relieved of any liability imposed by law for gross negligence. Each Seller acknowledges and agrees that Sellers' Representative shall not be obligated to take any actions and shall be entitled to take such actions as Sellers' Representative deems appropriate in such Sellers' Representative's sole discretion, and shall indemnify and hold harmless Sellers' Representative for all Losses incurred by Sellers' Representative in connection with the performance of his duties hereunder or in any way relating to him in his capacity as Sellers' Representative hereunder, except to the extent that such Losses are the direct result of the Sellers' Representative's gross negligence.

(d) Actions of the Representative. Each Seller agrees that Buyer shall be entitled to rely on any action taken by Sellers' Representative, on behalf of the Sellers pursuant to **Section 2.07(a)** above (each, an "**Authorized Action**"), and that each Authorized Action shall be binding on each such Seller as fully as if such Person had taken such Authorized Action. Each Seller acknowledges and agrees that any payment made by Buyer on behalf of such Seller to Sellers' Representative pursuant to this Agreement shall constitute full and complete payment to such Seller and Buyer shall have no further liability therefor. No Seller shall bring any suit, claim or proceeding against Buyer as a result of any actions or inactions of Sellers' Representative.

(e) Death or Disability of the Representative. In the event of the death or permanent disability or resignation of Sellers' Representative, a successor Sellers' Representative shall be appointed by Sellers, with each Seller (or his or its successors or assigns) to be given a vote equal to the number of votes represented by the Shares held by such Seller immediately prior to the Closing.

ARTICLE III
Representations and Warranties of Sellers

Except as set forth in the correspondingly numbered Section of the Disclosure Schedules, each Seller, severally but not jointly, and solely with respect to such Seller, 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 Sellers. Each Seller has all requisite power and authority, and, in the case of any Seller that is an individual, the requisite legal capacity, 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 each Seller of each of the Transaction Documents to which it is a party have been duly authorized by all necessary action on the part of each such Seller. This Agreement and the other Transaction Documents have been duly and validly executed and delivered by each Seller and constitute legal, valid and binding obligations of each Seller, enforceable against such Seller 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. Except as set forth in **Section 3.02** of the Disclosure Schedules, the execution, delivery and performance by each Seller of this Agreement and the other Transaction Documents to which it or he is a party, the consummation of the transactions contemplated hereby or thereby, and compliance by each Seller 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 such Seller is a party or by which such Seller or its properties, assets or Shares 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, subscriptions, options, warrants, calls, proxies, commitments or Contracts of any kind upon any of the Shares. No Approval, Governmental Order, waiver, declaration or filing with, or notification to any Person, including any Governmental Authority, is required on the part of such Seller in connection with the execution, delivery and performance of this Agreement or the other Transaction Documents, or the compliance by such Seller with any of the provisions hereof or thereof.

Section 3.03 The Shares.

(a) Each Seller holds of record and owns beneficially all of the Shares set forth opposite such Seller's name in **Section 3.03(a)** of the Disclosure Schedules hereto under the heading "Number of Shares Owned," free and clear of all Encumbrances, subscriptions, commitments and restrictions of any kind. The number of Shares set forth opposite such Seller's name in **Section 3.03(a)** of the Disclosure Schedules hereto under the heading "Number of Shares Owned" correctly sets forth all of the capital stock of the Company owned of record or beneficially by such Seller, and such Seller (and direct or indirect owner of such Seller if an entity) does not own (or have any rights in or to acquire) any other capital stock of the Company or any other securities convertible into, or exercisable or exchangeable for, capital stock of the Company. Such Seller's Shares were not issued in violation of (i) any Contract to which such Seller is or was a party or beneficiary or by which such Seller or its properties or assets is or was subject or (ii) of any preemptive or similar rights of any Person. The ultimate beneficial ownership of each Seller that is an entity and any direct or indirect entity owner of, or Person which owns any direct or indirect interest in, any such Seller that is an entity is set forth in **Section 3.03(a)** of the Disclosure Schedules.

(b) Except as set forth in **Section 3.03(b)** of the Disclosure Schedules and the Voting Agreement, each Seller (and direct or indirect owner of such Seller if an entity) is not party to (i) any voting agreement, voting trust, proxy, registration rights agreement, stockholder agreement or other Contract with respect to the capital stock of the Company or (ii) any Contract obligating such Seller (or direct or indirect owner) to vote or dispose of any shares of the capital stock of, or other equity or voting interests in, the Company or which has the effect of restricting or limiting the transfer, voting or other rights associated with the Shares.

Section 3.04 Brokers Fees. No Seller has any Liability to pay any commissions or similar fees to any investment banker, broker or finder with respect to the transactions contemplated by this Agreement.

ARTICLE IV Representations and Warranties of the Company

Except as set forth in the correspondingly numbered Section of the Disclosure Schedules, the Company and each Seller, severally but not jointly, represent and warrant to Buyer that the statements contained in this **Article IV** are true and correct as of the date hereof.

Section 4.01 Organization, Authority and Qualification of the Company. The Company is a corporation duly organized, validly existing and in good standing under the Laws of Switzerland as of the date hereof. The Company has full corporate power and authority to own, operate or lease the properties and assets now owned, operated or leased by it and to carry on its business as it has been and is currently conducted. **Section 4.01** of the Disclosure Schedules sets forth each jurisdiction in which the Company is licensed or qualified to do business, and the Company is duly licensed or qualified to do business and is in good standing in each jurisdiction in which the properties owned or leased by it or the operation of its business as currently conducted makes such licensing or qualification necessary, except where the failure to be so licensed, qualified or in good standing would not have a Material Adverse Effect. All corporate actions taken by the Company in connection with this Agreement and the other Transaction Documents will be duly authorized on or prior to the Closing. This Agreement and the other Transaction Documents have been duly and validly executed and delivered by the Company and constitute legal, valid and binding obligations of the Company, enforceable against the Company 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 4.02 Capitalization.

(a) Sellers are the record owners of and have good and valid title to all of the Shares, free and clear of all Encumbrances and own such Shares in the amounts set forth opposite each Seller's name as set forth on **Section 4.02** of the Disclosure Schedules. The Shares constitute one hundred percent (100%) of the total issued and outstanding shares of capital stock in the Company. The Shares have been duly authorized and are validly issued, fully-paid and non-assessable. Upon consummation of the transactions contemplated by this Agreement, Buyer shall own all of the Shares, free and clear of all Encumbrances.

(b) The Shares were issued in compliance with applicable Laws. The Shares were not issued in violation of the Organizational Documents of the Company or any other agreement, arrangement or commitment to which such Seller or the Company is a party and are not subject to or in violation of any preemptive or similar rights of any Person.

(c) There are no outstanding or authorized options, warrants, convertible securities or other rights, agreements, arrangements or commitments of any character relating to any shares of capital stock in the Company or obligating any Seller or the Company to issue or sell any shares of capital stock (including the Shares), or any other interest, in the Company. Other than the Organizational Documents, there are no voting trusts, proxies or other agreements or understandings in effect with respect to the voting or transfer of any of the Shares.

(d) Each Subsidiary of the Company, if any, is wholly-owned by the Company, and the Company is the record owner of and has good and valid title to the equity interests of its Subsidiaries, free and clear of all Encumbrances. All of the outstanding equity securities of the Company and each of its Subsidiaries are duly authorized, validly issued, fully paid and non-assessable and were not issued in violation of, and are not subject to, any preemptive rights or in violation of any applicable Laws. There are no outstanding options, warrants, calls, demands, stock appreciation rights, Contracts or other rights of any nature to purchase, obtain or acquire, or otherwise relating to, or any outstanding securities or obligations convertible into or exchangeable for, or any voting agreements or any other similar contract, agreement, arrangement, commitment, plan or understanding restricting or otherwise relating to the issuance, sale, purchase, redemption, conversion, exchange, registration, voting, dividend, ownership or transfer rights of any equity securities of the Company or any of its Subsidiaries. There are no outstanding or authorized stock appreciation, phantom equity, profit participation or similar rights with respect to the Company or any of its Subsidiaries.

Section 4.03 Subsidiaries. **Section 4.03** of the Disclosure Schedules sets forth a complete list indicating, as of the date of this Agreement, each direct and indirect Subsidiary of the Company, and with respect to each such Subsidiary of the Company: the type of entity of such Subsidiary, and the jurisdictions of organization and foreign qualification of such Subsidiary. Except for the Subsidiaries listed in **Section 4.03** of the Disclosure Schedules, the Company does not have any direct or indirect equity investment (including without limitation, any investment convertible or exchangeable into any equity) or other investment in any Person. Each Subsidiary of the Company is duly organized, validly existing and in good standing (to the extent applicable) under the Laws of its jurisdiction of incorporation or formation. Each Subsidiary of the Company has all requisite power and authority to own, lease and operate its properties and to carry on its business. Each Subsidiary of the Company is duly qualified or licensed to do business and is in good standing (to the extent applicable) as a foreign organization in each jurisdiction in which the conduct of its business or the ownership, leasing, holding or use of its properties makes such qualification necessary.

Section 4.04 No Conflicts; Approvals. The execution, delivery and performance by the Company 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 the Company, or any Subsidiary of the Company; (b) conflict with or result in a violation or breach of any provision of any Law or Governmental Order applicable to the Company, or any Subsidiary of the Company; (c) except as set forth in **Section 4.04** of the Disclosure Schedules, require the Approval, notice or other action by any Person under, conflict with, result in a violation or breach of, constitute a default or an event that, with or without notice or lapse of time or both, would constitute a default under, result in the acceleration of or create in any party the right to accelerate, terminate, modify or cancel any Contract to which the Company, or any Subsidiary of the Company is a party or by which the Company or any Subsidiary of the Company is bound or to which any of their respective properties and assets are subject (including any Material Contract) or any Permit affecting the properties, assets or business of the Company or any Subsidiary of the Company; or (d) result in the creation or imposition of any Encumbrance on any properties or assets of the Company or any Subsidiary of the Company. No Approval, Permit, Governmental Order, declaration or filing with, or notice to, any Governmental Authority is required by or with respect to any Seller, the Company, or any Subsidiary of the Company in connection with the execution and delivery of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby.

Section 4.05 Financial Statements. Complete copies of the Company's and its Subsidiaries' consolidated audited financial statements consisting of the balance sheet of the Company and its Subsidiaries as at December 31, 2017 and the related statements of income and retained earnings, members' equity and cash flow from the period from September 4, 2017 (inception) through December 31, 2017 (the "**Audited Financial Statements**"), and unaudited financial statements consisting of the balance sheet of the Company and its Subsidiaries as at December 31, 2018 and the related statements of income and retained earnings, members' equity and cash flow for the twelve month period then ended (the "**Interim Financial Statements**" and together with the Audited Financial Statements, the "**Financial Statements**") have been delivered to Buyer. The Financial Statements have been prepared in accordance with IFRS applied on a consistent basis throughout the period involved, subject, in the case of the Interim Financial Statements, to normal and recurring year-end adjustments (the effect of which will not, individually or in the aggregate, be materially adverse) and the absence of notes (that, if presented, would not differ materially from those presented in the Audited Financial Statements). The Financial Statements are based on the Books and Records of the Company and its Subsidiaries, and fairly present, in all material respects, the financial condition of the Company and its Subsidiaries as of the respective dates they were prepared and the results of the operations of the Company for the periods indicated. The balance sheet of the Company and its Subsidiaries as of December 31, 2017 is referred to herein as the "**Balance Sheet**" and the date thereof as the "**Balance Sheet Date**" and the balance sheet of the Company and its Subsidiaries as of December 31, 2018 is referred to herein as the "**Interim Balance Sheet**" and the date thereof as the "**Interim Balance Sheet Date**". The Company maintains a standard system of accounting controls and procedures established and administered in accordance with IFRS.

Section 4.06 No Activities and No Liabilities. The Company and its Subsidiaries own no other assets other than the Company Intellectual Property identified on **Section 4.09(b)(i)** of the Disclosure Schedules. Since their respective dates of organization, the Company and its Subsidiaries have (i) not had any operations, (ii) not had any employees, consultants or independent contractors that rendered any services (except for attorneys and accountants in connection with their organizations and any matters with respect to the Company Intellectual Property and in connection with this Agreement and the transactions contemplated hereby) and have not had any pension, benefit, retirement, compensation, employment, consulting, profit-sharing, deferred compensation, incentive, bonus, performance award, phantom equity or other equity, change in control, retention, severance, vacation, paid time off, welfare, fringe-benefit and other similar agreement, plan, policy, program or arrangement in existence, (iii) not owned, leased or subleased any real or personal property, and (iv) not incurred any Company Indebtedness or any liabilities, obligations or commitments of any nature whatsoever, asserted or unasserted, known or unknown, absolute or contingent, accrued or unaccrued, matured or unmatured or otherwise ("**Liabilities**"), except for the Assignment and Royalty Agreement and those which are adequately reflected or reserved against in the Balance Sheet as of the Balance Sheet Date and except as set forth on Section 4.06 of the Disclosure Schedules.

Section 4.07 Absence of Certain Changes, Events and Conditions. Since the Balance Sheet Date, and other than as set forth on **Section 4.07** of the Disclosure Schedules, there has not been, with respect to the Company or any of its Subsidiaries, any:

- (i) event, occurrence or development that has had, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect;
- (ii) amendment of the Organizational Documents of the Company or any of its Subsidiaries;
- (iii) split, combination or reclassification of any shares of capital stock in the Company or the equity interests of any Subsidiary of the Company;
- (iv) issuance, sale or other disposition of, or creation of any Encumbrance on, any shares of capital stock in the Company or equity interest in any Subsidiary of the Company, or grant of any options, warrants or other rights to purchase or obtain (including upon conversion, exchange or exercise) any shares of capital stock or equity interest in the Company or any of its Subsidiaries;
- (v) declaration or payment of any distributions on or in respect of any shares of capital stock in the Company or equity interest in any Subsidiary, or redemption, purchase or acquisition of any of the Company's outstanding shares of capital stock or any equity interest of any Subsidiary of the Company;
- (vi) material change in any method of accounting or accounting practice of the Company or any Subsidiary thereof, except as required by IFRS or as disclosed in the notes to the Financial Statements;
- (vii) entry into any Contract that would constitute a Material Contract;
- (viii) incurrence, assumption or guarantee of any indebtedness for borrowed money;
- (ix) transfer, assignment, sale or other disposition of any of the assets shown or reflected in the Balance Sheet;
- (x) transfer, assignment or grant of any license or sublicense of any material rights under or with respect to any Company Intellectual Property;
- (xi) any capital investment in, or any loan to (or forgiveness of any loan to), any other Person;
- (xii) acceleration, termination, material modification to or cancellation of any material Contract (including, but not limited to, any Material Contract) to which the Company or any of its Subsidiaries is a party or by which it is bound;
- (xiii) any material capital expenditures;

(xiv) imposition of any material Encumbrance upon any of the Company's (or any Subsidiary of the Company's) material properties or assets, tangible or intangible;

(xv) entry into any transaction with or paying any fees or expenses to any Affiliate or any of their members or current or former managers or officers or any other respective Affiliates;

(xvi) adoption of any plan of merger, consolidation, reorganization, liquidation or dissolution or filing of a petition in bankruptcy under any provisions of federal or state bankruptcy Law or Approval to the filing of any bankruptcy petition against it under any similar Law;

(xvii) purchase, lease or other acquisition of the right to own, use or lease any property or assets;

(xviii) acquisition by merger or consolidation with, or by purchase of a substantial portion of the assets, stock or other equity of, or by any other manner, any business or any Person or any division thereof;

(xix) action by the Company or any of its Subsidiaries to make, change or rescind any Tax election, amend any Tax Return or take any position on any Tax Return, take any action, omit to take any action or enter into any other transaction that would have the effect of materially increasing the Tax liability or reducing any Tax asset of Buyer in respect of any Post-Closing Tax Period; or

(xx) any Contract to do any of the foregoing, or any action or omission that would result in any of the foregoing.

Section 4.08 Material Contracts.

(a) **Section 4.08(a)** of the Disclosure Schedules lists each Contract of the Company and/or its Subsidiaries, including, without limitation, the Assignment and Royalty Agreement (such Contracts, together with all Contracts concerning any Intellectual Property listed or otherwise disclosed in **Section 4.08(a)** of the Disclosure Schedules, being "**Material Contracts**"). Other than the Assignment and Royalty Agreement, there are no other royalty or licensing agreements relating to the Company or any Subsidiary of the Company or the Company Intellectual Property or other arrangements or amounts owed to any third parties with respect thereto or under any other similar agreements or arrangements, whether conditioned on the achievement of milestones, passage of time or otherwise.

(b) Each Material Contract is valid and binding on the Company and/or its Subsidiaries, as applicable, in accordance with its terms and is in full force and effect. None of the Company or, to Sellers' Knowledge, any other party thereto is in breach of or default under (or is alleged to be in breach of or default under), or has provided or received any notice of any intention to terminate, any Material Contract. No event or circumstance has occurred that, with notice or lapse of time or both, would constitute an event of default under any Material Contract or result in a termination thereof or would cause or permit the acceleration or other changes of any right or obligation or the loss of any benefit thereunder. Complete and correct copies of each Material Contract (including all modifications, amendments and supplements thereto and waivers thereunder) have been made available to Buyer.

Section 4.09 Intellectual Property.

(a) To the Knowledge of the Company and to the Knowledge of the Sellers, the Company owns, free and clear from all Encumbrances the Company Patents (“**Owned Intellectual Property**”) other than Scripps ownership rights to the Company Patents (the “**Scripps Rights**”) and possesses legally enforceable rights pursuant to a valid and enforceable written license, sublicense, agreement, or permission to use the intellectual property licensed by the Company (“**Licensed Intellectual Property**”); the Company owns or is the valid licensee of all Company Intellectual Property and the Licensed Intellectual Property and each item of the Company Intellectual Property owned by the Company immediately prior to the Closing will be owned or available for use by the Company on identical terms and conditions immediately subsequent to the Closing hereunder; 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 Assignment and Royalty Agreement, and in that certain Opko Scripps License Agreement, with respect to, or require the consent of any other Person in respect of, the Company’s right to own or use any Company Intellectual Property or Licensed Intellectual Property.

(b) **Section 4.09(b)(i)** of the Disclosure Schedules sets forth a true, correct, and complete list of all Patents in which the Company has an ownership interest (indicating whether such interest is sole ownership or joint ownership) that is issued by or registered with a Governmental Authority or for which an application for issuance or registration has been filed with a Governmental Authority. **Section 4.09(b)(ii)** of the Disclosure Schedules sets forth a true, correct, and complete list of all Licensed Intellectual Property.

(c) 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 Company 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 Company Intellectual Property and the operation of the Company’s business as currently used and conducted, has not and will not infringe upon or misappropriate any valid and enforceable Intellectual Property rights of third parties other than the Scripps Rights and, to Sellers’ Knowledge, there are no facts indicating a likelihood of the foregoing other than with respect to the Scripps Rights. The Company has never received any written charge, complaint, claim, demand, or notice alleging any such infringement or misappropriation (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 Sellers’ Knowledge, written threat, action, lawsuit, or other judicial, arbitral or administrative proceeding involving any Company Intellectual Property, including, without limitation, involving any claim that Company infringed, misappropriated or violated the Intellectual Property Rights of any third party.

(d) The Company has, and to Sellers’ Knowledge, all applicable third parties and licensees have, complied with all applicable Laws relating to the Company Intellectual Property, including without limitation the Company Patents. The Company has taken steps to protect and preserve the confidentiality of all confidential Company Intellectual Property.

(e) To the Company's and Sellers' Knowledge, the Company has complied with and is presently in compliance 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 Company Intellectual Property, and the Company shall take all steps necessary to ensure such compliance until Closing.

(f) The only 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 Company Intellectual Property by any third party or affiliate are identified in **Section 4.09(f)** of the Disclosure Schedules (the "**Intellectual Property Licenses**"). The Intellectual Property Licenses are valid, binding, and enforceable between the Company and the other parties thereto and are in full force and effect. To the Company's Knowledge, there is no written notice of material breach of any Intellectual Property License by the Company or, to the Knowledge of Sellers, by any other party thereto.

(g) To the Company's Knowledge, and to the Knowledge of the Sellers, the Owned Intellectual Property and the Licensed Intellectual Property are valid and enforceable and in full force; the Owned Intellectual Property and the Licensed Intellectual Property: (i) are not subject to any opposition, cancellation, interference, reissue, reexamination, derivation, revocation or post-grant proceeding and, to the Knowledge of Sellers, 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 Company Intellectual Property applications have been timely submitted with and paid to the relevant Governmental Authorities; the Company has provided Buyer with true and complete copies of all file histories, documents, office actions, official correspondence, assignments, and other instruments relating to Company Intellectual Property; and all maintenance fees and annuities required with respect to such Company Intellectual Property to date have been timely paid in full.

(h) To the Company's Knowledge and to the Knowledge of the Sellers: the Company and all prior and current owners (other than the Scripps Rights) of any Owned 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 Owned 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 Owned 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 Owned Intellectual Property.

(i) To the Company's Knowledge and to the Knowledge of Sellers: (i) no fact or circumstance (other than with respect any facts or circumstances relating to the Scripps Rights) exists that could reasonably be expected to otherwise adversely affect the enforceability or ownership of any Company Intellectual Property.

(j) 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 Company Intellectual Property and, to Sellers' Knowledge, at no time has any Person infringed or misappropriated any Company Intellectual Property.

(k) 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 Company Intellectual Property.

(l) Sellers acknowledge that they and any of their direct or indirect owners and Affiliates, and the scientists and inventors who assisted in the creation and development of the Company Intellectual Property, (i) retain no ownership interest or right to use the Owned Intellectual Property other than as may be provided under the Bayh-Dole Act or any similar foreign statute, regulation or rule; (ii) grant to the Company a present, irrevocable assignment of any ownership interest such Seller may have in or to such Intellectual Property; and (iii) irrevocably waive any right or interest, including any moral rights, regarding any such 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. All assignments and other instruments necessary to establish, record, and perfect the Company's ownership interest in the Company Intellectual Property have been validly executed, delivered, and filed with the relevant Governmental Authorities and authorized registrars. Except as disclosed in **Section 4.09(l)(ii)** of the Disclosure Schedules, no Company Intellectual Property is co-owned by, exclusively licensed to, or otherwise controlled by any other Person (other than the Scripps Rights), including any Seller or 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 Seller or any current or former employee, officer, director, consultant, contractor, scientist or inventor for any Owned Intellectual Property other than under the Assignment Agreement or the Opko Scripps License Agreement.

(m) Except as disclosed on **Schedule 4.09(m)** of the Disclosure Schedules, by executing and performing its obligations under this Agreement, the Company and each Seller are not in violation of any agreement between the Company or any Seller and any third party relating to any of the Company Intellectual Property.

Section 4.10 Regulatory Compliance.

(a) The Company has all material Permits and Approvals necessary to conduct its business as presently conducted.

(b) Neither the Company nor any Subsidiary nor, to Sellers' Knowledge, any of their respective owners, officers, directors, employees and agents, have manufactured, produced, distributed or sold regulated products, or have conducted preclinical or human clinical trials. The Company and its Subsidiaries have not failed to disclose a material fact required to be disclosed to any Regulatory Authority.

(c) Neither the Company nor any Subsidiary nor, to Sellers' Knowledge, any owners, officers, directors, employees and agents, have made an untrue statement of material fact in any filing or other written submission to the FDA or any other Regulatory Authority, or to Sellers' Knowledge, in any records or documentation prepared or maintained to comply with applicable Laws. The Company has not failed to disclose a material fact required to be disclosed to any Regulatory Authority.

(d) The Company and its Subsidiaries are not the subject of any pending or, to the Knowledge of Sellers, threatened investigation in respect of the Company or any Subsidiary or any of their respective products by any Regulatory Authority, including without limitation by the FDA pursuant to its "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. Neither the Company nor any Subsidiary nor, to Sellers' Knowledge, any of their owners, officers, directors, employees and agents, have paid or given, offered or promised to pay or give, or authorized or ratified the illegal payment or giving, directly or indirectly, of any monies or anything of value to any national, provincial, municipal or other government official or employee or any political party or candidate for political office or Governmental Authority for the direct or indirect purpose of influencing any act or decision of such Person or of the Governmental Authority to obtain or retain business, or direct business to any person or to secure any other improper benefit or advantage.

(e) Neither the Company nor any Subsidiary nor, to the Knowledge of Sellers, any officer, employee, consultant, contractor, principal investigator, clinical investigator or agent of the Company or any Subsidiary is or has been (i) suspended, excluded, debarred, or convicted of any federal or state crime that would reasonably be expected to result in mandatory or permissive suspension, exclusion, or debarment, under 21 U.S.C. Section 335a or any similar federal, state or foreign legal requirement or (ii) suspended, excluded, debarred, or convicted of any federal or state crime that would reasonably be expected to result in mandatory or permissive suspension, exclusion, or debarment under 42 U.S.C. Section 1320a-7, or suspension or debarment or ineligibility on the United States General Services Administration System for Award Management list (formerly known as the "Excluded Parties List System" or "EPLS"), or in each case any similar federal, state or foreign applicable legal requirement which would prohibit an individual or entity from conducting business with a federal or state agency.

(f) The Company and its Subsidiaries have complied with all applicable Laws governing data protection, privacy, security, and the use, disclosure, processing or storage of personal or individually identifiable information, howsoever defined under such Laws, Contracts or policies ("**Personal Information**"). **Section 4.10(f)** of the Disclosure Schedules sets forth any agreement between the Company or any Subsidiary and any third party with respect to the privacy, security, or processing of Personal Information that is regulated by any Law of any jurisdiction outside the United States, including without limitation any model contracts for the transfer of personal data to third countries adopted by the European Commission (each a "**Processing Agreement**"). The Company and its Subsidiaries are not in material violation of or in material default under any such Processing Agreement. Except as set forth on **Section 4.10(f)** of the Disclosure Schedules, no Approval, permission, or notice is required to be made to or obtained from any third party with respect to any Personal Information owned or used by or on behalf of the Company or any Subsidiary in connection with the execution, delivery, and performance of this Agreement.

Section 4.11 Legal Proceedings; Governmental Orders.

(a) Except as set forth in **Section 4.11(a)** of the Disclosure Schedules, there are no Actions pending or, to Sellers' Knowledge, threatened (a) against or by the Company or its Subsidiaries affecting any of its properties or assets, including, without limitation, the ownership or efficacy of the Company Intellectual Property (or by or against Sellers or any Affiliate thereof and relating to the Company or any of its Subsidiaries); or (b) against or by the Company, its Subsidiaries, Sellers or any Affiliate of Sellers that challenges or seeks to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To the Knowledge of the Sellers, no event has occurred or circumstances exist that may give rise to, or serve as a basis for, any such Action.

(b) Except as set forth in **Section 4.11(b)** of the Disclosure Schedules, there are no outstanding Governmental Orders and no unsatisfied judgments, penalties or awards against or affecting the Company, its Subsidiaries or any of their respective properties or assets.

(c) Except as set forth in **Section 4.11(c)** of the Disclosure Schedules, none of the Company or any of its Subsidiaries has had any complaints or notices or Actions from or by any Persons, whether to the Company, its Subsidiaries or any Governmental Authority, and there exists no reasonable basis to believe that any Governmental Authority or any other Person would receive any such notice, complaints or Actions as result of any actions, inactions or practices of the Company and/or its Subsidiaries.

Section 4.12 Compliance With Laws; Permits.

(a) The Company and each of its Subsidiaries have complied, and are now complying, [in all material respects] with all Laws applicable to it or its business, properties or assets.

(b) All Permits required for the Company and/or its Subsidiaries to conduct its or their business have been obtained and are valid and in full force and effect. All fees and charges with respect to such Permits as of the date hereof have been paid in full. **Section 4.12(b)** of the Disclosure Schedules lists all current Permits issued to the Company or any Subsidiary thereof, including the names of the Permits and their respective dates of issuance and expiration. There is no pending or, to the Sellers' Knowledge, threatened termination, expiration or revocation of any such Permits.

Section 4.13 Taxes. Except as set forth in **Section 4.13** of the Disclosure Schedules:

(a) All income Tax Returns and all other material Tax Returns required to be filed by the Company 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 Company or any Subsidiary thereof (whether or not shown on any Tax Return) have been timely paid.

(b) The Company 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 Company or any Subsidiary of the Company 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.

(d) No extensions or waivers of statutes of limitations have been given or requested with respect to any Taxes of the Company or any Subsidiary thereof that remain in effect.

(e) **Section 4.13(e)** of the Disclosure Schedules sets forth:

(i) the taxable years of the Company and its Subsidiaries as to which the applicable statutes of limitations on the assessment and collection of Taxes have not expired;

(ii) those years for which audits by the taxing authorities have been completed; and

(iii) those taxable years for which audits by taxing authorities are presently being conducted.

(f) All deficiencies asserted, or assessments made, against the Company and any Subsidiary thereof as a result of any examinations by any taxing authority with respect to Taxes or Tax Returns of the Company or its Subsidiaries have been fully paid or otherwise finally resolved.

(g) Neither the Company nor any Subsidiary thereof is currently a party to any Action by any taxing authority. There are no pending, or, to Sellers' Knowledge, threatened, Actions by any taxing authority.

(h) There are no Encumbrances for Taxes (other than for current Taxes not yet due and payable) upon the assets of the Company or any Subsidiary thereof.

(i) Neither the Company nor any Subsidiary of the Company is a party to, or bound by, any Tax indemnity, Tax-sharing or Tax allocation agreement other than ancillary provisions in any customary commercial contracts entered into in the ordinary course of business the primary purpose of which is unrelated to Taxes.

(j) No private letter rulings, technical advice memoranda or similar tax agreement or rulings have been requested, entered into or issued by any taxing authority with respect to the Company or any of its Subsidiaries.

(k) The Company has not been a member of an affiliated, combined, consolidated or unitary Tax group for Tax purposes. The Company has no Liability for Taxes of any Person (other than the Company), as transferee or successor, by contract or otherwise.

(l) The Company is not, nor has it been, a United States real property holding corporation (as defined in Section 897(c)(2) of the Code) during the applicable period specified in Section 897(c)(1)(a) of the Code.

(m) Neither the Company nor any Subsidiary thereof is or has been a party to, or a promoter of, a “reportable transaction” within the meaning of Section 6707A(c)(1) of the Code and Treasury Regulations Section 1.6011-4(b).

(n) **Section 4.13(n)** of the Disclosure Schedules sets forth all foreign jurisdictions in which the Company or any Subsidiary thereof is subject to Tax, is engaged in business or has a permanent establishment.

Notwithstanding anything to the contrary contained in this Agreement (including any other representations and warranties contained in this Agreement), the representations and warranties contained in this Section 4.13 are (i) the sole and exclusive representations and warranties made by the Company relating to Tax matters, including compliance with and liabilities arising under Tax laws and (ii) cannot be relied upon with respect to Taxes or Tax Returns attributable to any Tax periods of the Company (or portions thereof) beginning after, or Tax positions or Tax attributes taken after, the Closing Date.

Section 4.14 Books and Records. All of the books and records of the Company and its Subsidiaries have been maintained in the ordinary course of business of the Company and its Subsidiaries and fairly reflect, in all material respects, all transactions of the business of the Company and its Subsidiaries.

Section 4.15 Brokers. Except as set forth in **Section 4.15** 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 the Company or its Subsidiaries.

Section 4.16 Related Party Transactions. Except as described in **Section 4.16** of the Disclosure Schedules, the Company and its Subsidiaries do not have outstanding any Company Indebtedness or other obligations to or from, any Affiliate of the Company, any Subsidiary or any Seller. Except as described in **Section 4.16** of the Disclosure Schedules, neither the Company nor its Subsidiaries nor any Seller nor any Affiliate of the Company or any Subsidiary or any Seller nor, to the Knowledge of the Sellers, any officer, director, manager or employee of any of them (i) has during the last three fiscal years owned any direct or indirect interest of any kind in, or controls or is a director, manager, officer, employee or partner of, or consultant to, or lender to or borrower from or has the right to participate in the profits of, any Person that is (A) a competitor, supplier, distributor, customer, landlord, tenant, creditor or debtor of or inventor for the Company or any Subsidiary, (B) engaged in a business related to the Restricted Business, or (C) a participant in any material transaction to which the Company or any Subsidiary has been a party, or (ii) has been a party to any Contract with the Company or any Subsidiary or engaged in any transaction or business with the Company or any Subsidiary, or (iii) owns any assets reasonably required to affect Buyer’s ability to successfully commercialize the Company Intellectual Property.

Section 4.17 Full Disclosure. No representation or warranty by Sellers or the Company in this Agreement and no statement contained in the Disclosure Schedules to 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 4.18 Independent Investigation. Each Seller 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. Each Seller acknowledges and agrees that: (a) in making its decision to enter into this Agreement and to consummate the transactions contemplated hereby, each Seller has relied solely upon its own investigation and the express representations and warranties of Buyer set forth in **Article V**; and (b) 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 V**.

ARTICLE V

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 Seller that the statements contained in this **Article V** are true and correct as of the date hereof.

Section 5.01 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 Seller) this Agreement constitutes a legal, valid and binding obligation of Buyer enforceable against Buyer in accordance with its terms.

Section 5.02 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 5.03 Brokers. Except as described in Section 5.03 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 5.04 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 5.05 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 each Seller, pursuant to this Agreement free of any Encumbrance, subject to the restrictions set forth herein and applicable securities Laws.

Section 5.06 Buyer SEC Reports; Financial Statements. Except as set forth on **Section 5.06** 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 5.07 Tax Matters.

(a) Except as set forth on **Section 5.07(a)** 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 5.08 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, 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 the Company in **Article IV**; and (b) none of the Sellers, the Company, or any other Person makes or has made any representation or warranty as to the Sellers or the Company or this Agreement, except as expressly set forth in **Article III** or **Article IV**.

ARTICLE VI
Covenants

Section 6.01 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), Sellers shall, and shall cause the Company and its Subsidiaries to, (x) conduct the business of the Company and its Subsidiaries in the ordinary course of business consistent with past practice; and (y) use commercially reasonable efforts to maintain and preserve intact the current organization, business, the Company Intellectual Property and franchise of the Company and its Subsidiaries, and to preserve the rights, franchises, goodwill and business relationships of the Company and/or its Subsidiaries. Without limiting the foregoing, from the date hereof until the Closing Date, Seller shall:

- (a) cause the Company and/or its Subsidiaries to preserve and maintain all of their Permits;
- (b) cause the Company and/or its Subsidiaries to pay their debts, Taxes and other obligations when due;
- (c) cause the Company and/or its Subsidiaries to maintain the properties and assets and Company Intellectual Property owned, operated or used by the Company and/or its Subsidiaries, as applicable, in the same condition as they were on the date of this Agreement, subject to reasonable wear and tear;
- (d) cause the Company and/or its Subsidiaries to defend and protect their properties and assets from infringement or usurpation;
- (e) cause the Company and/or its Subsidiaries to perform all of their obligations under all Contracts relating to or affecting its properties, assets or business;
- (f) cause the Company and/or its Subsidiaries to maintain their Books and Records in accordance with past practice;
- (g) cause the Company and/or its Subsidiaries to comply in all material respects with all applicable Laws; and
- (h) cause the Company and/or its Subsidiaries not to take or permit any action that would cause any of the changes, events or conditions described in **Section 4.07** to occur.

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

Section 6.03 No Solicitation of Other Bids.

(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, the Company and Sellers shall not, and shall not authorize or permit any of their Affiliates or any of its or their Representatives to, directly or indirectly, (i) encourage, solicit, initiate, facilitate or continue inquiries regarding an Acquisition Proposal; (ii) enter into discussions or negotiations with, or provide any information to, any Person concerning a possible Acquisition Proposal; or (iii) enter into any agreements or other instruments (whether or not binding) regarding an Acquisition Proposal. The Company and Sellers shall immediately cease and cause to be terminated, and shall cause their Affiliates and all of their Representatives to immediately cease and cause to be terminated, all existing discussions or negotiations with any Persons conducted heretofore with respect to, or that could lead to, an Acquisition Proposal. For purposes hereof, “**Acquisition Proposal**” shall mean any inquiry, proposal or offer from any Person (other than Buyer or any of its Affiliates) concerning (i) a merger, consolidation, liquidation, recapitalization or other business combination transaction involving the Company and/or its Subsidiaries; (ii) the issuance or acquisition of equity interests in the Company and/or its Subsidiaries; or (iii) the sale, lease, exchange or other disposition of any Company Intellectual Property or any significant portion of the Company’s properties or assets.

(b) In addition to the other obligations under this **Section 6.03**, the Company and Sellers shall promptly (and in any event within three (3) Business Days after receipt thereof) advise Buyer orally and in writing of any Acquisition Proposal, any request for information with respect to any Acquisition Proposal, or any inquiry with respect to or which could reasonably be expected to result in an Acquisition Proposal, the material terms and conditions of such request, Acquisition Proposal or inquiry, and the identity of the Person making the same.

(c) Sellers agree that the rights and remedies for noncompliance with this **Section 6.03** shall include having such provision specifically enforced by any court having equity jurisdiction, it being acknowledged and agreed that any such breach or threatened breach shall cause irreparable injury to Buyer and that money damages would not provide an adequate remedy to Buyer.

Section 6.04 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, Sellers' Representative 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 or Sellers 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 8.02** 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, whether or not in connection with the transactions contemplated by this Agreement; and

(iv) any Actions commenced or, to Seller's Knowledge, threatened against, relating to or involving or otherwise affecting Seller or the Company that, if pending on the date of this Agreement, would have been required to have been disclosed pursuant to **Section 4.11** or that relates to the consummation of the transactions contemplated by this Agreement.

(b) Buyer's receipt of information pursuant to this **Section 6.04** shall not operate as a waiver or otherwise affect any representation, warranty or agreement given or made by the Company or Sellers in this Agreement (including **Section 9.02** and **Section 10.01(b)**) and shall not be deemed to amend or supplement the Disclosure Schedules.

Section 6.05 Resignations and Appointments.

(a) The Company shall deliver to Buyer written resignations, effective as of the Closing Date, of the officers and managers of the Company and/or its Subsidiaries set forth on **Section 6.05(a)** of the Disclosure Schedules at least three (3) Business Days prior to the Closing.

(b) Effective as of the Closing Date (and upon receipt of Stockholder Approval) and subject to reasonable background searches, Dr. Alexey Vinogradov shall be appointed to the Buyer Board.

Section 6.06 Confidentiality. Sellers acknowledge that any confidentiality agreement executed with the Company shall survive the execution of this Agreement and shall be automatically terminated as of the Closing Date. From and after the Closing, each Seller 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 Company and/or its Subsidiaries and the Company Intellectual Property, except to the extent that such Seller can show that such information (a) is generally available to and known by the public through no fault of any Seller, any of its Affiliates or their respective Representatives; or (b) is lawfully acquired by such Seller, any of its Affiliates or their respective Representatives from and after the Closing from sources which are not prohibited from disclosing such information by a legal, contractual or fiduciary obligation. If any Seller or its Affiliates or their respective Representatives are compelled to disclose any information by judicial or administrative process or by other requirements of Law, such Seller shall promptly notify Buyer in writing and shall disclose only that portion of such information which such Seller is advised by its counsel in writing is legally required to be disclosed, *provided that* such Seller shall use reasonable best efforts to obtain an appropriate protective order or other reasonable assurance that confidential treatment will be accorded such information.

Section 6.07 Non-competition; Non-solicitation.

(a) For a period of five (5) years commencing on the Closing Date (the “**Restricted Period**”), each Seller shall not, and shall not permit any of its Affiliates to, directly or indirectly, (i) engage in or assist others in engaging in the Restricted Business in the Territory; (ii) have an interest in any Person that engages directly or indirectly in the Restricted Business in any capacity, including as a partner, stockholder, member, manager, inventor, employee, principal, agent, trustee or consultant; or (iii) intentionally interfere in any material respect with the business relationships (past or present) of the Company, Buyer and/or any of their Subsidiaries. Notwithstanding the foregoing, each Seller may own, directly or indirectly, solely as an investment, securities of any Person traded on any national securities exchange if such Seller is not a controlling Person of, or a member of a group which controls, such Person and, except as set forth on **Section 6.07(b)** of the Disclosure Schedules, does not, directly or indirectly, own 5% or more of any class of securities of such Person (other than the Transaction Shares).

(b) During the Restricted Period, each Seller shall not, and shall not permit any of its Affiliates to, directly or indirectly, hire or solicit any inventor or scientist of the Company or any Affiliate or any party involved in the creation and/or development of the Company Intellectual Property (irrespective of whether any such party performed work on behalf of the Company or any Affiliate), or interfere with the relationship between any such party and the Company or any Affiliate, or hire any such party who is no longer involved with the Company or any Affiliate, except pursuant to a general solicitation which is not directed specifically to any such party; *provided, that* nothing in this Section 6.06(b) shall prevent any Seller or any of its Affiliates from hiring (i) any inventor or scientist whose employment has been terminated by the Company or Buyer or (ii) after one hundred and eighty (180) days from the date of termination of employment, any inventor or scientist whose employment has been terminated by the employee.

(c) During the Restricted Period, Sellers shall not, and shall not permit any of their Affiliates to, directly or indirectly, solicit or entice away or divert, or attempt to solicit or entice away or divert, any business relationships of the Company and/or its Subsidiaries.

(d) Each Seller acknowledges that a breach or threatened breach of this **Section 6.07** would give rise to irreparable harm to Buyer, for which monetary damages would not be an adequate remedy, and hereby agrees that in the event of a breach or a threatened breach by Sellers of any such obligations, Buyer shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to equitable relief, including a temporary restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction (without any requirement to post bond).

(e) Each Seller acknowledges that the restrictions contained in this **Section 6.07** are reasonable and necessary to protect the legitimate interests of Buyer and constitute a material inducement to Buyer to enter into this Agreement and consummate the transactions contemplated by this Agreement. In the event that any covenant contained in this **Section 6.07** should ever be adjudicated to exceed the time, geographic, product or service, or other limitations permitted by applicable Law in any jurisdiction, then any court is expressly empowered to reform such covenant, and such covenant shall be deemed reformed, in such jurisdiction to the maximum time, geographic, product or service, or other limitations permitted by applicable Law. The covenants contained in this **Section 6.07** and each provision hereof are severable and distinct covenants and provisions. The invalidity or unenforceability of any such covenant or provision as written shall not invalidate or render unenforceable the remaining covenants or provisions hereof, and any such invalidity or unenforceability in any jurisdiction shall not invalidate or render unenforceable such covenant or provision in any other jurisdiction. In addition, any breach by Buyer of any provision of this Agreement or any related agreement shall not diminish or affect the validity or enforceability of this **Section 6.07**.

(f) PJSC «Pharmsynthez» and Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, which entities are being provided royalties by the Company pursuant to the Assignment and Royalty Agreement shall execute separate non-competition and non-solicitation agreements as of the Closing containing the same or similar language as set forth in this **Section 6.07** (the "**Royalty Restrictive Covenant Agreements**").

Section 6.08 Governmental Approvals and Consents.

(a) Each Party hereto shall, as promptly as possible, (i) make, or cause or be made, all filings and submissions required under any Law applicable to such Party or any of its Affiliates; and (ii) use reasonable best efforts to obtain, or cause to be obtained, all Approvals, authorizations, orders and consents from all Governmental Authorities that may be or become necessary for its execution and delivery of this Agreement and the performance of its obligations pursuant to this Agreement and the other Transaction Documents. Each Party shall cooperate fully with the other party and its Affiliates in promptly seeking to obtain all such Approvals, authorizations, orders and approvals. The Parties hereto shall not willfully take any action that will have the effect of delaying, impairing or impeding the receipt of any required Approvals, authorizations, orders and approvals.

(b) Sellers shall use reasonable best efforts to give all notices to, and obtain all Approvals from, all third parties that are described in **Section 4.04** of the Disclosure Schedules.

(c) If any consent, Approval or authorization necessary to preserve any right or benefit under any Contract to which the Company is a party is not obtained prior to the Closing, Sellers shall, subsequent to the Closing, cooperate with Buyer and the Company in attempting to obtain such consent, Approval or authorization as promptly thereafter as practicable. If such consent, Approval or authorization cannot be obtained, Sellers shall use their reasonable best efforts to provide the Company with the rights and benefits of the affected Contract for the term thereof, and, if Sellers provide such rights and benefits, the Company shall assume all obligations and burdens thereunder.

Section 6.09 Books and Records.

(a) In order to facilitate the resolution of any claims made against or incurred by Sellers prior to the Closing, or for any other reasonable purpose, for a period of five (5) years after the Closing (or such longer period of time as required by law with respect to retention of Books and Records), Buyer shall:

(i) retain the Books and Records of the Company and its Subsidiaries relating to periods prior to the Closing in a manner reasonably consistent with the prior practices of the Company and its Subsidiaries; and

(ii) upon reasonable notice, afford Sellers or their Representatives reasonable access (including the right to make, at Seller's expense, photocopies), during normal business hours, to such Books and Records; *provided, however*, that any Books and Records related to Tax matters shall be retained pursuant to the periods set forth in **Article VII**.

(b) In order to facilitate the resolution of any claims made by or against or incurred by Buyer or the Company and/or its Subsidiaries after the Closing, or for any other reasonable purpose, for a period of five (5) years following the Closing, Sellers shall:

(i) retain the Books and Records of such Seller in its possession which relate to the Company and/or its Subsidiaries and their operations for periods prior to the Closing; and

(ii) upon reasonable notice, afford the Representatives of Buyer or the Company reasonable access (including the right to make, at Buyer's expense, photocopies), during normal business hours, to such Books and Records; *provided, however*, that any Books and Records related to Tax matters shall be retained pursuant to the periods set forth in **Article VII**.

(c) Neither Buyer nor Sellers shall be obligated to provide the other party with access to any Books or Records pursuant to this **Section 6.09** where such access would violate any Law.

Section 6.10 IP Development. From and after the Closing, Buyer shall use its commercially reasonable efforts to develop the Company Intellectual Property.

Section 6.11 Road Shows. From the date hereof until the Closing, the Company shall, and Sellers shall cause the Company to, make its scientists or inventors and other Representatives available for any "road show" and/or presentations, and use its reasonable best efforts to make any scientist who played a significant role in the development of the Company Intellectual Property (irrespective of whether such scientist was employed or engaged by the Company) to also be available for any such "road show" and/or presentations, in each case, as reasonably requested by Buyer and its Representatives in connection with efforts to procure the proposed Buyer Financing.

Section 6.12 Closing Conditions. From the date hereof until the Closing, each Party hereto shall, and Sellers shall cause the Company and/or its Subsidiaries to, use reasonable best efforts to take such actions as are necessary to expeditiously satisfy the closing conditions set forth in **Article VIII** hereof.

Section 6.13 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 Opko Assignment 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 Opko Assignment 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 the issuance of Buyer Common Stock in connection with the Opko Assignment 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, a SEC a Registration Statement on Form S-4, including a proxy statement, which shall serve as a 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 and registration statement on Form S-4 (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 adoption of this Agreement and the Opko Assignment 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 the Opko Assignment 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 the issuance of Buyer Common Stock in connection with the Opko Assignment 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) The Company shall use commercially reasonable efforts to provide promptly to Buyer such information concerning its and its Subsidiaries' business affairs and financial statements as is required under applicable Law for inclusion in the Proxy Statement (including the Audited Financial Statements and any other required audited, unaudited and pro forma financial statements), shall direct that its counsel cooperate with Buyer's counsel in the preparation of the Proxy Statement and shall request the cooperation of its auditors in the preparation of 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 or Sellers 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 or Sellers 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, Sellers (as applicable) 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 6.14 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 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 and Sellers 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 6.15 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 6.16 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 6.17 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 6.18 No Termination of Assignment and Royalty Agreement . Between the execution of this Agreement and the Closing, there shall be no termination of the Assignment and Royalty Agreement by any party thereto.

ARTICLE VII
Tax Matters

Section 7.01 Tax Covenants.

(a) (1) **Tax Elections.** Without the prior written consent of Buyer (which consent shall not be unreasonably withheld, conditioned or delayed), Sellers (and, prior to the Closing, the Company, its Affiliates and their respective Representatives) shall not, to the extent it may affect, or relate to, the Company and/or its Subsidiaries, make, change or rescind any Tax election, amend any Tax Return or take any position on any Tax Return, take any action, omit to take any action or enter into any other transaction that would have the effect of increasing the Tax liability or reducing any Tax asset of Buyer or the Company and/or its Subsidiaries in respect of any Post-Closing Tax Period.

(a)(2) **Amended Returns.** Buyer shall not, without the prior written consent of the Sellers' Representative (which consent shall not be unreasonably withheld, conditioned or delayed), with respect to Taxes or Tax Returns of the Company or its Subsidiaries for any taxable period ending on or before the Closing Date or any Straddle Period, (i) file (other than in accordance with Section 7.01(c)), re-file or amend or cause to be filed (other than in accordance with Section 7.01(c)), re-filed or amended any Tax Return, (ii) commence, enter or cause to be commenced or entered into discussions regarding any voluntary disclosure to a Governmental Authority, or (iii) consent to any extension or waiver of the limitation period applicable to any claim or assessment in respect of such Taxes or Tax Returns.

(b) All transfer, documentary, sales, use, stamp, registration, value added and other such Taxes and fees (including any penalties and interest) incurred in connection with this Agreement and the other Transaction Documents (collectively, "Transfer Taxes") shall be borne and paid fifty percent (50%) by Sellers and fifty percent (50%) by Buyer when due. Sellers' Representative shall, at Sellers' expense, timely file any Tax Return or other document with respect to such Taxes or fees (and Buyer shall cooperate with respect thereto as necessary). If Sellers are required by applicable Tax law to pay any such Transfer Taxes, the Buyer shall promptly reimburse Sellers within ten (10) days of receipt of written request from Sellers for fifty percent (50%) of such Transfer Taxes. If the Buyer is required by applicable Tax law to pay any such Transfer Taxes, Sellers shall promptly reimburse the Buyer within ten (10) days of receipt of written request from the Buyer for fifty percent (50%) of such Transfer Taxes. Each party hereto shall use its commercially reasonable efforts to minimize the amount of such Transfer Taxes and to cooperate in the preparation, execution and filing of all Tax Returns and other documents required in connection with such Transfer Taxes.

(c) Buyer shall prepare, or cause to be prepared, all Tax Returns required to be filed by the Company after the Closing Date with respect to a Pre-Closing Tax Period. Any such Tax Return shall be prepared in a manner consistent with past practice (unless otherwise required by Law) and without a change of any election or any accounting method and shall be submitted by Buyer to Sellers' Representative (together with schedules, statements and, to the extent requested by Sellers' Representative, supporting documentation) at least forty-five (45) days prior to the due date (including extensions) of such Tax Return. If Sellers' Representative objects to any item on any such Tax Return, it shall, within ten (10) days after delivery of such Tax Return, notify Buyer in writing that it so objects, specifying with particularity any such item and stating the specific factual or legal basis for any such objection. If no such notice is received by Buyer within such time period, then Sellers shall be deemed to have accepted such Tax Return as prepared by Buyer. If a notice of objection shall be duly delivered, Buyer and Sellers' Representative shall negotiate in good faith and use their reasonable best efforts to resolve such items. If Buyer and Sellers' Representative are unable to reach such agreement within ten (10) days after receipt by Buyer of such notice, the disputed items shall be resolved by the Independent Accountant and any determination by the Independent Accountant shall be final. The Independent Accountant shall resolve any disputed items within twenty (20) days of having the item referred to it pursuant to such procedures as it may require. If the Independent Accountant is unable to resolve any disputed items before the due date for such Tax Return, the Tax Return shall be filed as prepared by Buyer and then amended to reflect the Independent Accountant's resolution. The costs, fees and expenses of the Independent Accountant shall be borne equally by Buyer and Sellers' Representative. The preparation and filing of any Tax Return of the Company and/or its Subsidiaries that does not relate to, or otherwise include, a Pre-Closing Tax Period shall be exclusively within the control of Buyer.

Section 7.02 Termination of Existing Tax Sharing Agreements . Any and all existing Tax sharing agreements (whether written or not) binding upon the Company and/or its Subsidiaries shall be terminated as of the Closing Date (other than ancillary provisions in any customary commercial contracts entered into in the ordinary course of business the primary purpose of which is unrelated to Taxes). After such date neither the Company, Seller nor any of Seller's Affiliates and their respective Representatives shall have any further rights or Liabilities thereunder.

Section 7.03 Tax Indemnification. Sellers shall indemnify the Company, its Subsidiaries, Buyer, and each Buyer Indemnitee and hold them harmless from and against, without duplication, (a) any Loss attributable to any breach of or inaccuracy in any representation or warranty made in **Section 4.13**; (b) any Loss attributable to any breach or violation of, or failure to fully perform, any covenant, agreement, undertaking or obligation in **Article VII**; (c) all Taxes of the Company and its Subsidiaries for all Pre-Closing Tax Periods; (d) all Taxes of Sellers or the Company arising from transactions involving the transfer of the Company Intellectual Property to the Company; (e) Taxes of any member of an affiliated, consolidated, combined or unitary group of which the Company or any of its Subsidiaries (or any predecessor of the Company or any of its Subsidiaries) is or was a member on or prior to the Closing Date by reason of a liability under Treasury Regulation Section 1.1502-6 or any comparable provisions of foreign, state or local Law; and (f) any and all Taxes of any person imposed on the Company arising under the principles of transferee or successor liability, relating to an event or transaction occurring before the Closing Date (in each of the above cases, together with any out-of-pocket fees and expenses (including attorneys' and accountants' fees) incurred in connection therewith). Sellers shall reimburse Buyer for any Taxes of the Company that are the responsibility of Sellers pursuant to this **Section 7.03** within ten (10) Business Days after payment of such Taxes by Buyer or the Company.

Section 7.04 Straddle Period. For purposes of the Tax reimbursement and indemnity provisions of this Agreement, in the case of Taxes that are payable with respect to a taxable period that begins before and ends after the Closing Date (each such period, a "**Straddle Period**"), the portion of any such Taxes that are treated as Pre-Closing Taxes for purposes of this Agreement shall be:

(a) in the case of Taxes (i) based upon, or related to, income, receipts, profits, wages, capital or net worth, (ii) imposed in connection with the sale, transfer or assignment of property, or (iii) required to be withheld, deemed equal to the amount which would be payable if the taxable year ended with the Closing Date; and

(b) in the case of other Taxes, deemed to be the amount of such Taxes for the entire period multiplied by a fraction the numerator of which is the number of days in the period ending on the Closing Date and the denominator of which is the number of days in the entire period.

Section 7.05 Contests. Buyer agrees to give written notice to Sellers' Representative of the receipt of any written notice by the Company, Buyer or any of Buyer's Affiliates which involves the assertion of any claim, or the commencement of any Action, in respect of which an indemnity may be sought by Buyer pursuant to this **Article VII** (a "**Tax Claim**"). Buyer shall control the contest or resolution of any Tax Claim; *provided, however*, that Buyer shall obtain the prior written consent of Sellers' Representative (which consent shall not be unreasonably withheld or delayed) before entering into any settlement of a claim or ceasing to defend such claim; and, *provided further*, that Sellers' Representative shall be entitled to participate in the defense of such claim and to employ counsel of its choice for such purpose, the fees and expenses of which separate counsel shall be borne solely by Sellers' Representative.

Section 7.06 Cooperation and Exchange of Information. Sellers' Representative and Buyer shall provide each other with such cooperation and information as either of them reasonably may request of the other in filing any Tax Return pursuant to this **Article VII** or in connection with any audit or other proceeding in respect of Taxes of the Company. Such cooperation and information shall include providing copies of relevant Tax Returns or portions thereof, together with accompanying schedules, related work papers and documents relating to rulings or other determinations by tax authorities. Each of Sellers and Buyer shall retain all Tax Returns, schedules and work papers, records and other documents in its possession relating to Tax matters of the Company for any taxable period beginning before the Closing Date until the expiration of the statute of limitations of the taxable periods to which such Tax Returns and other documents relate, without regard to extensions except to the extent notified by the other party in writing of such extensions for the respective Tax periods. Prior to transferring, destroying or discarding any Tax Returns, schedules and work papers, records and other documents in its possession relating to Tax matters of the Company for any taxable period beginning before the Closing Date, Seller or Buyer (as the case may be) shall provide the other party with reasonable written notice and offer the other party the opportunity to take custody of such materials.

Section 7.07 Tax Refunds. Buyer shall cause the Company and its Subsidiaries to promptly pay to Sellers any refunds received of Tax paid to a Governmental Authority with respect to any Pre-Closing Tax Period: (i) if received by Buyer, the Company, its Subsidiaries or any Affiliate thereof, or (ii) when used by Buyer, the Company, its Subsidiaries or any Affiliate thereof to credit an account with a Governmental Authority ("Pre-Closing Tax Refunds"). Sellers will promptly reimburse Buyer for any reasonable out-of-pocket expenses incurred in filing, defending or prosecuting any Pre-Closing Tax Refund, and, if any Pre-Closing Tax Refund is disallowed or required to be repaid to a Governmental Authority, Sellers shall promptly reimburse Buyer for such Pre-Closing Tax Refund (plus any interest and penalties payable).

Section 7.08 Extraordinary Transactions. Buyer shall not cause to be made any extraordinary transaction or event on the Closing Date that would result in any increased Tax liability for which Sellers would be required to indemnify Buyer or otherwise liable pursuant to applicable Law.

Section 7.09 Tax Treatment of Indemnification Payments. Any indemnification payments pursuant to this Agreement shall be treated as an adjustment to the Purchase Price by the parties for Tax purposes, unless otherwise required by Law.

Section 7.10 Survival. Notwithstanding anything in this Agreement to the contrary, the provisions of **Section 4.13** and this **Article VII** shall survive for the full period of all applicable statutes of limitations (giving effect to any waiver, mitigation or extension thereof) plus sixty (60) days.

Section 7.11 Overlap. To the extent that any obligation or responsibility pursuant to **Article IX** may overlap with an obligation or responsibility pursuant to this **Article VII** or otherwise conflict with any provision of this **Article VII**, the provisions of this **Article VII** shall govern as it relates to Taxes and Tax Returns.

ARTICLE VIII
Conditions to closing

Section 8.01 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 any Seller 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) The Proxy Statement shall have become effective under the Securities Act. No stop order suspending the effectiveness of the Proxy Statement will have been issued by the SEC and no proceedings for that purpose and no similar proceeding in respect of the Proxy Statement will have been initiated or, to the knowledge of Buyer, threatened by the SEC.

Section 8.02 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 or Sellers, as applicable, shall have effected the transactions described in **Section 2.03(b)**.

(b) Other than the representations and warranties of the Company and each Seller contained in **Section 3.01, Section 3.02, Section 3.03, Section 4.01, Section 4.02, Section 4.03, Section 4.04, Section 4.06, Section 4.09, Section 4.15 and Section 4.16** the representations and warranties of the Company and each Seller 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 and each Seller contained in **Section 3.01, Section 3.02, Section 3.03, Section 4.01, Section 4.02, Section 4.03, Section 4.04, Section 4.06, Section 4.09, Section 4.15 and Section 4.16** 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 and Sellers 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) All Approvals, consents and waivers that are listed on **Section 4.04** of the Disclosure Schedules shall have been received, and executed counterparts thereof shall have been delivered to Buyer in form and substance acceptable to Buyer at or prior to the Closing.

(e) From the date of this Agreement, there shall not have occurred any Material Adverse Effect on the Company or any of its Subsidiaries, 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 or any of its Subsidiaries.

(f) Buyer's Board shall have received the Fairness Opinion supporting the enterprise valuation of the Company indicated by the consideration paid hereunder for the Shares;

(g) 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 and the Company following the Closing.

(h) IBCH shall have executed the Sponsored Research Agreement and delivered same to Buyer.

(i) The Royalty Restrictive Covenant Agreements shall have been executed by the appropriate parties thereto and delivered to Buyer;

(j) The other Transaction Documents shall have been executed and delivered by each Seller, as applicable, and true and complete copies thereof shall have been delivered to Buyer.

(k) Buyer shall have received a certificate, dated the Closing Date and signed by a duly authorized officer of the Company and by each Seller, that each of the conditions set forth in **Section 8.02(a)** and **Section 8.02(c)** have been satisfied.

(l) Buyer shall have received a certificate of the Secretary or an Assistant Secretary (or equivalent officer) of the Company certifying that attached thereto are true and complete copies of all resolutions adopted by the board of directors and stockholders of the Company authorizing the execution, delivery and performance of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby, and that all such resolutions are in full force and effect and are all the resolutions adopted in connection with the transactions contemplated hereby and thereby, and the incumbency of all officers of the Company executing this Agreement and any document executed and delivered in connection herewith.

(m) The Company shall have delivered to Buyer a good standing certificate (or its equivalent) for the Company and each of its Subsidiaries from the secretary of state or similar Governmental Authority of the jurisdictions under the Laws in which the Company and each Subsidiary is organized.

(n) The Opko Assignment Agreement and the transactions contemplated thereunder shall have been consummated.

(o) The Company and each Seller 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 8.03 Conditions to Obligations of the Company and each Seller. The obligations of the Company and each Seller to consummate the transactions contemplated by this Agreement shall be subject to the fulfillment or Sellers' Representative'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 5.01, Section 5.02 and Section 5.03**, 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 5.01, Section 5.02 and Section 5.03** 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 duly authorized Secretary of Buyer shall have delivered to the Company (i) certified copies of the New Buyer Charter and the New Buyer Bylaws (to the extent Buyer in its discretion determines that the Domestication will be completed at Closing), and (ii) resolutions adopted by Buyer's stockholders evidencing the Stockholder Approval, and shall have certified the incumbency of all officers of Buyer executing this Agreement and any document executed and delivered in connection herewith.

(e) The other 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.

(f) The Company shall have received a certificate, dated the Closing Date and signed by a duly authorized officer of Buyer, that each of the conditions set forth in **Section 8.03(a)** and **Section 8.03(c)** have been satisfied.

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

(h) Buyer shall have delivered to Dmitry Genkin by wire transfer of immediately available funds an amount equal to the outstanding amount actually advanced by Dmitry Genkin under that certain Loan Contract, dated as of November 21, 2018, between Dmitry and the Company, which amount shall not exceed \$150,000.

(i) Buyer shall have completed the Buyer Financing.

ARTICLE IX Indemnification

Section 9.01 Survival. Subject to the limitations and other provisions of this Agreement, the representations and warranties contained herein (other than any representations or warranties contained in **Section 4.13** which are subject to **Article VII**) shall survive the Closing and shall remain in full force and effect until the date that is twenty-four (24) months from the Closing Date (the “**Non-Fundamental Survival Period**”); *provided*, that the representations and warranties in **Section 3.01, Section 3.02, Section 3.03, Section 4.01, Section 4.02, Section 4.03, Section 4.04, Section 4.06, Section 4.09, Section 4.15 and Section 4.16, Section 5.01, Section 5.02 and Section 5.03** (collectively, the “**Fundamental Representations**”) shall survive indefinitely. All covenants and agreements of the parties contained herein (other than any covenants or agreements contained in **Article VII** which are subject to **Article VII**) 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 9.02 Indemnification By Sellers. Subject to the other terms and conditions of this **Article IX**, Sellers shall indemnify and defend each of Buyer and its Affiliates (including the Company) 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 or any Seller contained in this Agreement or in any certificate or instrument delivered by or on behalf of the Company or any Seller pursuant to this Agreement (other than in respect of **Section 4.13**, it being understood that the sole remedy for any such inaccuracy in or breach thereof shall be pursuant to **Article VII**), 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 or any Seller pursuant to this Agreement (other than any breach or violation of, or failure to fully perform, any covenant, agreement, undertaking or obligation in **Article VII**, it being understood that the sole remedy for any such breach, violation or failure shall be pursuant to **Article VII**); and

(c) any Company Indebtedness and any Company Transaction Expenses to the extent not paid at Closing. Sellers' indemnification responsibility pursuant to this **Section 9.02** shall be several (in accordance with such Seller's Pro Rata Share.

Section 9.03 Indemnification By Buyer. Subject to the other terms and conditions of this **Article IX**, Buyer shall indemnify and defend Sellers and its Affiliates and their respective Representatives (collectively, the "**Seller Indemnitees**") against, and shall hold each of them harmless from and against, and shall pay and reimburse each of them for, any and all Losses incurred or sustained by, or imposed upon, the Seller Indemnitees based upon, arising out of, with respect to or by reason of:

(a) any inaccuracy in or breach 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 (other than any breach or violation of, or failure to fully perform, any covenant, agreement, undertaking or obligation in **Article VII**, it being understood that the sole remedy for any such breach, violation or failure shall be pursuant to **Article VII**).

Section 9.04 Certain Limitations. The indemnification provided for in **Section 9.02** and **Section 9.03** shall be subject to the following limitations:

(a) Subject to **Section 9.04(c)**, Sellers shall not be liable to the Buyer Indemnitees for indemnification under **Section 9.02(a)** until the aggregate amount of all Losses in respect of indemnification under **Section 9.02(a)** exceeds \$50,000 (the "**Basket**"), in which event Sellers shall be required to pay or be liable for all such Losses in excess of the Basket. Subject to **Section 9.04(c)** and **Section 9.07**, the aggregate amount of all Losses for which Sellers shall be liable pursuant to **Section 9.02(a)** shall not exceed fifteen percent (15%) of the Transaction Shares, based on the Closing Price (the "**Cap**").

(b) Subject to **Section 9.04(c)**, Buyer shall not be liable to the Seller Indemnitees for indemnification under **Section 9.03(a)** until the aggregate amount of all Losses in respect of indemnification under **Section 9.03(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 9.04(c)**, the aggregate amount of all Losses for which Buyer shall be liable pursuant to **Section 9.03(a)** shall not exceed the Cap.

(c) Notwithstanding the foregoing, the limitations set forth in **Section 9.04(a)** and **Section 9.04(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 9.02(c)** (collectively, the “**Indemnification Exclusions**”).

(d) For purposes of this **Article IX**, 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.

(e) Sellers acknowledge and agree that, notwithstanding anything contained herein to the contrary, following the Closing Date, Sellers shall not be entitled to or shall not pursue any rights of contribution or similar rights against the Company or any Subsidiary for any Losses paid or payable to any Buyer Indemnitees hereunder by Sellers or Sellers' Representative.

Section 9.05 Indemnification Procedures. The party making a claim under this **Article IX** is referred to as the “**Indemnified Party**”, and the party against whom such claims are asserted under this **Article IX** is referred to as the “**Indemnifying Party**”. Any claim to be made to or by Sellers hereunder shall be made to or by the Sellers' Representative (on behalf of the Sellers).

(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 if the Indemnifying Party is any Seller, 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. Sellers' Representative 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 6.06**) 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. If the Indemnifying Party does not so respond within such thirty (30) day period, the Indemnifying Party shall be deemed to have acknowledged and agreed to pay such claim in full and to have waived any right to dispute such claim.

Section 9.06 Payments. Once a Loss is agreed to by the Indemnifying Party or is determined to be payable pursuant to this **Article IX**, the Indemnifying Party shall satisfy its obligations within two (2) Business Days of such determination by wire transfer of immediately available funds, subject to Buyer's election to excise its rights of set-off under **Section 9.07**.

Section 9.07 Set-Off . Sellers hereby agree and acknowledge that Buyer may, at its sole discretion, offset any or all amounts of Losses against any amounts otherwise payable in connection herewith to any Seller or any Affiliate of such Seller, including without limitation any amounts payable under the Assignment and Royalty Agreement; *provided, however*, that with respect to any indemnification claim made under **Section 9.02(a)** the aggregate amount of set-off shall not exceed the Cap.

Section 9.08 Exclusive Remedies. Subject to **Section 6.07** and **Section 11.11**, 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 **Article VII** and this **Article IX**. In furtherance of the foregoing, each Party hereby waives, to the fullest extent permitted under Law, any and all rights, claims and causes of action for any breach of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement it may have against the other parties hereto and their Affiliates and each of their respective Representatives arising under or based upon any Law, except pursuant to the indemnification provisions set forth in **Article VII** and this **Article IX**. Nothing in this **Section 9.08** 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 X
Termination

Section 10.01 Termination. This Agreement may be terminated at any time prior to the Closing:

(a) by the mutual written consent of Sellers' Representative and Buyer;

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

(ii) any of the conditions set forth in **Section 8.01** or **Section 8.02** 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 Sellers' Representative by written notice to Buyer if:

(i) the Company and Sellers are not then in material breach of any provision of this Agreement and there has been a breach, inaccuracy in or failure to perform any representation, warranty, covenant or agreement made by Buyer pursuant to this Agreement that would give rise to the failure of any of the conditions specified in **Article VIII** 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 Sellers' Representative; or

(ii) any of the conditions set forth in **Section 8.01** or **Section 8.03** 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 or any Seller 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 Sellers' Representative 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 10.02 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 X** and **Section 6.16** and **Article XI** 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 XI
Miscellaneous

Section 11.01 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; *provided, however*, that Sellers shall be responsible for payment of all Company Transaction Expenses prior to or at Closing and Buyer shall pay all brokers' and other fees incurred by it as set forth in **Section 5.03** of the Disclosure Schedules, and Sellers shall pay all brokers' and other fees incurred by it as set forth in **Section 4.15** of the Disclosure Schedules.

Section 11.02 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 11.02**):

If to Sellers or Sellers' Representative:

Hesperix SA
Agus Corporate Services SA
Via Luganetto 4
PO Box 433
CH-6962 Lugano-Viganello
Facsimile:
E-mail:
Attention: Alexey Andreevich Vinogradov

with a copy (which shall not constitute notice) to: Alexey Andreevich Vinogradov 119311 Moscow, Russia
4-7-54 Stroiteley str
Facsimile:
E-mail:
Attention: Alexey Andreevich Vinogradov

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 11.03 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 11.04 Headings. The headings in this Agreement are for reference only and shall not affect the interpretation of this Agreement.

Section 11.05 Severability. If any term or provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction. Except as provided in **Section 6.07(e)**, 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 11.06 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 11.07 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 Sellers, 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 11.08 No Third-party Beneficiaries. Except as provided in **Section 7.03** and **Article IX**, 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 11.09 Amendment and Modification; Waiver. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by Buyer and the Sellers' Representative on behalf of the Sellers. 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 Sellers' Representative on behalf of Sellers. 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 11.10 Governing Law; Submission to Jurisdiction; Waiver of Jury Trial.

(a) This Agreement, including the relationship between the Sellers and the Sellers' Representative, 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 11.10(C)**.

Section 11.11 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 11.12 Prevailing Party Fees. In the event of a dispute arising under this Agreement or any Transaction Documents, whether or not a lawsuit or other proceeding 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 11.13 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.

SELLERS:

/s/ Dr. Alexander Gabibovich Gabibov
Dr. Alexander Gabibovich Gabibov

/s/ Alexey Vyacheslavovich Stepanov
Alexey Vyacheslavovich Stepanov

/s/ Alexey Anatolievich Belogurov
Alexey Anatolievich Belogurov

/s/ Dr. Dmitry Dmitrievich Genkin
Dr. Dmitry Dmitrievich Genkin

/s/ Dr. Alexey Vinogradov
Dr. Alexey Vinogradov

/s/ Dr. Richard Lerner
Dr. Richard Lerner

/s/ Ivan Vitalievich Smirnov
Ivan Vitalievich Smirnov

[SIGNATURE PAGE TO SHARE PURCHASE AGREEMENT]

BUYER:

XENETIC BIOSCIENCES, INC.

By: /s/ Jeffrey Eisenberg
Name: Jeffrey Eisenberg
Title: CEO

COMPANY:

HESPERIX SA

By: /s/ Robert Frigerio
Name: Robert Frigerio
Title: Director

SELLERS' REPRESENTATIVE:

Alexey Andreevich Vinogradov

By: /s/ Alexey Andreevich Vinogradov
Name: Alexey Andreevich Vinogradov
Title:

[SIGNATURE PAGE TO SHARE PURCHASE AGREEMENT]

EXHIBIT A

ASSIGNMENT AGREEMENT

This Assignment Agreement (the “Agreement”) is dated as of March 1, 2019 (the “Effective Date”) by and between:

- (i) Hesperix SA, a corporation registered under the laws of Switzerland, company no. CHE-434.229.465, located at via Luganetto 4, 6962, Viganello, Switzerland (“Hesperix” or “Assignee”), on one hand, and
- (ii)
 - (1) Alexey Vyacheslavovich Stepanov, an individual residing at Ostrovityananova street, bld. 45/2, app. 44, Moscow, 117342, Russian Federation (“Stepanov”),
 - (2) Alexander Gabibovich Gabibov, an individual residing at Yauzsky Boulevard 14, App.10, Moscow 109028, Russian Federation (“Gabibov”),
 - (3) Ivan Vitalievich Smirnov, an individual residing at 2/1 Kutuzovskiy prt, App 222 121248, Moscow, Russian Federation (“Smirnov”);
 - (4) Dmitry Dmitrievich Genkin, an individual residing at Konstantinovsky Avenue 26, App 2, St. Petersburg 197110 Russian Federation (“Genkin”),
 - (5) Richard A. Lerner, an individual, residing at 7750 Roseland Drive, La Jolla, CA 92037, USA (“Lerner”),
 - (6) Alexey Anatolievich Belogurov, an individual residing at Ryblevskoe shosse, bld. 9, app. 53, Moscow 121108, Russian Federation (“Belogurov”),
 - (7) Alexey Vinogradov, an individual residing at 4, Stroiteley Str., Block 4, App. 54, Moscow, Russian Federation (“Vinogradov”);
 - (8) Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, an educational institution, located at Miklukho-Maklaya 16/10, 117997, Moscow, V-437, Russian Federation (the “Institute”),
 - (9) PJSC «Pharmsynthez», a public joint stock company located at 134, Liter 1, Kuzmolovsky urban-type settlement, Capitolovo station, Vsevolozhsky district, 188663, Leningrad region, Russian Federation (“Pharmsynthez”) (Stepanov, Gabibov, Genkin, Lerner, Belogurov, the Institute, and PharmSynthez, collectively “Assignors”), on the other hand.

RECITALS

Whereas, Hesperix is a pharmaceutical company engaged in the research, development, manufacturing, and commercialization of pharmaceutical and biological products;

Whereas, the Assignors are named inventors, applicants, or owners of one or more of the Patents (as defined below);

Whereas, Gabibov, Stepanov, Smirnov, Belogurov, Genkin, and Vinogradov, as of the Effective Date, are shareholders of Hesperix;

Whereas, prior hereto, each of Stepanov, Gabibov and Belogurov granted to the Institute an irrevocable assignment of the Patents each owned, and in turn, the Institute hereby grants to the Assignee an assignment of such Patents as provided herein;

Whereas, prior hereto, Genkin granted to Pharmsynthez an irrevocable assignment of the Patents he owned, and in turn, Pharmsynthez hereby grants to the Assignee an assignment to such Patents as provided herein;

Whereas, prior hereto, Lerner, as an employee of The Scripps Research Institute, a California public benefit corporation located at 10550 North Torrey Pines Road, La Jolla, CA 92037, USA ("Scripps"), granted to Scripps an irrevocable assignment of the Patents he owned;

Whereas, the Assignors, directly or indirectly, desire to assign to Hesperix all of their respective rights, title, and interests in the Patents and Know-How as provided herein; and

Whereas, Hesperix desires to acquire the Assignors' respective rights, title, and interests in the Patents as provided herein;

Now, Therefore, in consideration of the foregoing premises and the mutual covenants contained herein, the Parties (as defined below), intending to be legally bound, agree as follows:

ARTICLE 1 DEFINITIONS

The following terms shall have the following meanings as used in this Agreement:

1.1 "Actions" means all charges, complaints, actions, suits, proceedings, hearings, investigations, claims, demands, judgments, orders, decrees, stipulations or injunctions.

1.2 "Affiliate" means any Person (as defined below) or combination thereof that, directly or indirectly, owns or controls a Party (as defined below) hereto, is owned or controlled by such Party or is under common ownership or control with such Party, the terms "control" and "controlled" in this definition (including, with correlative meaning, the terms "controlled by" or "under the common control with") meaning ownership (including ownership by trusts with substantially the same beneficial interests, or by contract or otherwise) of at least fifty percent (50%) of the voting or equity rights of such Person or combination thereof or the power to direct the management of such Person or combination thereof. For the avoidance of doubt, neither of the Parties shall be deemed to be an Affiliate of the other solely as a result of their entering into this Agreement.

1.3 "Business Day" means any day other than (i) Saturday or Sunday or (ii) any other day on which banks in New York, New York are permitted or required to be closed.

1.4 "Calendar Day" means any day.

1.5 "Calendar Quarter" means the three (3) month periods ending on March 31, June 30, September 30, and December 31 in each Calendar Year (as defined below).

1.6 "Calendar Year" means the twelve (12) month period beginning January 1 and ending December 31 of any year.

1.7 “Commercial Sale” means any arm’s length sale by Hesperix or by any licensee of any of Hesperix’s right, title or interest in the Patents (as defined below) to a Third Party (as defined below). Sales for test marketing, clinical study purposes, or compassionate, named patient, or similar use shall not constitute a Commercial Sale.

1.8 “Confidential Information” shall mean, with respect to any Party hereto, all confidential or proprietary information, whether written, electronic, or oral, which is disclosed by a Party (the “Disclosing Party”) to another Party (the “Receiving Party”). Notwithstanding the foregoing, Confidential Information of a Party shall not include information: (a) which was publicly known prior to initial disclosure of such information by the Disclosing Party to the Receiving Party, (b) that has become publicly known, in print, other tangible form, or electronic form, without any act or omission of the Receiving Party, (c) received by the Receiving Party without restriction at any time from a Third Party (as defined below), other than the Disclosing Party, rightfully having possession of and the right to disclose such information, (d) shown to have been otherwise known by the Receiving Party prior to disclosure of such information by the Disclosing Party to the Receiving Party as proven by prior written records in existence prior to such initial disclosure, or (e) shown to have been independently developed by employees or agents of the Receiving Party without access to or use of such information of the Disclosing Party as proven by the receiving party’s written records.

1.9 “Control” means (except as otherwise used in the context of the definition of Affiliates), with respect to any intellectual property right or other intangible property in which a Party (as defined below) or one of its Affiliates has, in whole or in part, any right, title, interest, license or sublicense, the ability to grant direct or indirect access, license, or sublicense to without violating the terms of any agreement or other arrangement in force as of the Effective Date with any Third Party (as defined below).

1.10 “Governmental Authority” means any court, tribunal, arbitrator, agency, legislative body, commission, official or other instrumentality of (a) any government of any country, (b) a federal, state, province, county, city or other political subdivision thereof or (c) any supranational body, including the European Agency for the Evaluation of Medicinal Products.

1.11 “Herein”, “hereof”, and “hereunder” and words of like import refer to this Agreement as a whole and not to any particular provision of this Agreement.

1.12 “Include”, “includes”, or “including” shall be deemed to be followed by the words “without limitation”, whether or not they are in fact followed by those words or words of like import.

1.13 “Know-How” means the names of the vendors that, as of the Effective Date, are contemplated by the Assignors to carry out the development of the inventions claimed in the Patents.

1.14 “Knowledge” means, with respect to a natural person, to the recollection, as of the Effective Date, of that natural person, and with respect to a non-natural person, to the recollection, as of the Effective Date, of that natural person executing this Agreement on behalf of such non-natural person.

1.15 “Law” means all laws, statutes, rules, codes, regulations, orders, judgments, or ordinances of any Governmental Authority.

1.16 “Net Sales” means, with respect to a Product, the amount invoiced by Hesperix, its Affiliates, or any of their respective licensees for Commercial Sales of such Product less:

- (i) transportation charges, warehousing costs and expenses, freight and insurance;
- (ii) taxes (other than taxes based on income), tariffs, regulatory fees, user fees, customs duty, excise, or other duty, manufacture, use, and any other governmental charges, all to the extent imposed upon the sale, transportation or delivery of such Product and paid by the seller;
- (iii) Third Party (as defined below) distributor fees;
- (iv) trade discounts, quantity discounts, cash discounts, prompt payment discounts, rebates, free goods (including 2-for-1 and the like), or chargebacks actually granted, given, allowed, or incurred in the ordinary course of business in connection with the sale of such Product, including any credits, volume rebates, charge-back and prime vendor rebates, fees, reimbursements or similar payments granted or given to wholesalers and other distributors, buying groups, health care insurance carriers, pharmacy benefit management companies, health maintenance organizations, or other institutions or health care organizations, physicians, or patients;
- (v) adjustments, allowances or credits to customers, including on account of price adjustments, governmental requirements, billing errors, rejection, damage, recalls, or return of such Product;
- (vi) payments or rebates paid in connection with sales of Products to any Governmental Authority or regulatory authority in respect of any state or federal Medicare, Medicaid, or similar programs; and
- (vii) any item substantially similar in character or substance to the foregoing.

For the purposes of determining Net Sales, in the event a Product is sold in a finished combination package containing such 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 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 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 Product and such other products, equipment or components to the overall value of such Combination Product. Assignee 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 Product in combination form or otherwise.

Notwithstanding the foregoing, the disposition of a Product or the use of the Product in clinical studies, compassionate, named patient, test marketing, any non-registrational studies, or any other instance where the Product is supplied without charge shall not result in any Net Sales. Any Products donated by Hesperix, its licensee, or its assignee to non-profit institutions or government agencies for a non-commercial purpose shall not result in any Net Sales. Similarly, any free Products (including two for one and the like) which are supplied to a Third Party (as defined below) in conjunction with the offer for sale or sale of any Product will not result in any Net Sales of such free goods. Additionally, amounts received by Hesperix, its licensee(s), its assignee(s) or any respective Affiliates of any of the foregoing for the sale of Products among any of the foregoing for resale shall not be included in the computation of Net Sales hereunder. The use of a Product by or on behalf of Hesperix, its licensee(s), or any of Affiliates of any of the foregoing for research and Development purposes shall not result in any Net Sales.

1.17 "Party" means any of Hesperix, Stepanov, Gabibov, Smirnov, Genkin, Lerner, Belogurov, Vinogradov, the Institute, or Pharmsynthez.

1.18 "Parties" means all of Hesperix, Stepanov, Gabibov, Smirnov, Genkin, Lerner, Belogurov, Vinogradov, the Institute, and Pharmsynthez.

1.19 "Patents" means (i) the patent applications listed in Exhibit 1.17; (ii) any valid and enforceable patents, re-examinations, reissues, renewals, extensions, supplementary protection certificates and term restorations, any confirmation patent or registration patent or patent of addition based on any such patent application, (iii) all continuation, continuation-in-part, divisional, provisional, and substitute applications and inventors' certificates of any of the foregoing; (iv) all foreign counterparts of any of the foregoing; and (v) all priority applications of any of the foregoing.

1.20 "Person" means any natural person, corporation, firm, business trust, joint venture, association, organization, company, partnership, other entity or combination, government, or any agency, or subdivisions of any of the foregoing.

1.21 "Product" means any active pharmaceutical, chemical or biological ingredient, component thereof, formulation thereof, dosage form, or use or manufacture of any of the foregoing disclosed in a Patent or encompassed by the claims of a Patent. For the avoidance of doubt, any Product that includes more than one such active pharmaceutical, chemical or biological ingredient, component thereof, formulation thereof, or dosage form thereof will be considered a single Product.

1.22 "Third Party" means any Person other than any of the Parties.

1.23 "Valid Claim" means a claim of an issued and unexpired patent or a claim of a pending patent application within the Patents 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 1.23, if a claim of a pending patent application within the Patents has not issued as a claim of an issued patent within the Patents, 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.

1.24 "Writing", "written", and comparable terms refer to printing, typing and other means of reproducing words (including electronic media) in a visible form.

1.25 Additional Definitions. Each of the following definitions is set forth in the Sections indicated below:

Definition	Section
Affected Party	Section 6.2
Agreement	Preamble
Bankruptcy Event	Section 6.2
Belogurov	Preamble
Combination Product	Section 1.16
Confirmatory Assignment	Section 2.1(b)
Control (wrt Affiliate)	Section 1.2
Disclosing Party	Section 1.8
Effective Date	Preamble
Gabibov	Preamble
Genkin	Preamble
Hesperix	Preamble
Institute	Preamble
IP License Agreement	Recitals
Lerner	Preamble
Pharmsynthez	Preamble
Receiving Party	Section 1.8
Required Third Party License	Section 3.6
Scripps	Recitals
Scripps Rights	Section 2.1(b)
Smirnov	Preamble
Stepanov	Preamble
Vinogradov	Preamble
Withholding Taxes	Section 3.7

1.26 Agreement References. References to any agreement or contract are to that agreement or contract as amended, modified or supplemented in writing from time to time in accordance with the terms hereof and thereof.

1.27 Ambiguities. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

1.28 Capitalization. Any capitalized terms used in any Schedule or Exhibit but not otherwise defined therein shall have the meaning as defined in this Agreement.

1.29 Date References. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively.

1.30 Gender. Unless the context of this Agreement otherwise requires, words of one gender include the other gender.

1.31 Headings. Headings and captions of the Articles and Sections hereof are for convenience only and are not to be used in the interpretation of this Agreement.

1.32 Joint and Several Obligations. Unless specified otherwise in this Agreement, the obligations of all Parties hereto are several.

1.33 No Strict Construction. This Agreement has been prepared jointly and shall not be strictly construed against either Party.

1.34 Number of Days. Whenever this Agreement refers to a number of days, unless otherwise specified, such number shall refer to Calendar Days.

1.35 Person References. References to any Person include the successors and permitted assigns of that Person.

1.36 References to Parts of this Agreement. References to Articles and Sections are to Articles and Sections of this Agreement unless otherwise specified.

1.37 Exhibits. All Exhibits annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein.

1.38 Singular/Plural. Any singular term in this Agreement shall be deemed to include the plural, and any plural term the singular.

1.39 United States Dollars. References in this Agreement to "Dollars" or "\$" shall mean the legal tender of the United States of America.

ARTICLE 2 – ASSIGNMENT

2.1 Assignments: Certain Representations.

(a) Prior to the Effective Date, each of Stepanov, Gabibov and Belogurov will have granted to the Institute an irrevocable assignment of the Patents each owned, and Genkin will have granted to Pharmsynthez an irrevocable assignment of the Patents he owned.

(b) Subject to the terms of this Agreement and in order to fulfill the Parties' obligations under this Agreement, Assignors, collectively own all right, title, and interest, throughout the world in all inventions in the Patents and Know-How, free and clear of all liens or other encumbrances of any nature whatsoever other than any right title and interest that Scripps has in the Patents and Know-How (the "Scripps Rights"), and Hesperix desires to purchase all of Assignors' collective rights, title, interests throughout the world in the same, free and clear of all liens or other encumbrances of any nature whatsoever; for the consideration paid by Hesperix, the receipt and sufficiency of which are hereby acknowledged, Assignors, directly or indirectly as provided above, each hereby irrevocably sell, assign, transfer, and convey unto Hesperix all of their individual right, title, and interest throughout the world in and to said Patents and Know-How (including the right to sue for past infringement thereof) including in and to any patent application whether conventional, design, divisional, continuation, continuation-in-part, and continued prosecution applications, requests for continued examination, substitutions, patents of addition, reissues, renewals, or reexams thereof, and in and to all inventions thereon, preparatory to obtaining Letters Patent of the United States and patents throughout the world therefore; and Assignors each hereby authorize the United States Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States and shall request all patent authorities throughout the world to issue any and all patents anywhere in the world included in or resulting from said Patents, free and clear of all liens or other encumbrances of any nature whatsoever, to Hesperix, for its interest and for the sole use and benefit of Hesperix and its assigns and legal representatives; *provided, however*, that the Parties acknowledge and agree that their respective rights, title, interests, and obligations pursuant to this assignment and Agreement are subject to the rights of the United States Government, existing and as amended, which may arise or result from Scripps and Scripps' assignors receipt of research support from the United States Government. Each Assignor will execute a Confirmatory Assignment substantially in the form of Exhibit 2.1 attached hereto for recordation purposes.

2.2 No Other Technology Rights. It is understood and agreed that this Agreement does not grant any Party any license, covenant, or other right in the intellectual property of any other Party other than as expressly specified in this Agreement. As of the Effective Date, the Assignee or its designee or successor intends to develop Products using the Patents, and each Assignor has and will have no interest in such Products, except as set forth in or contemplated by this Agreement or as an owner of Assignee or Xenetic Biosciences Inc. following the closing of its acquisition of Assignee. No other compensation or amount is owed any other party in connection with making, conceiving or developing the Patents, except as otherwise provided in this Agreement or in any agreement between or among the Parties or Xenetic Biosciences Inc. concerning ownership of Assignee or Xenetic Biosciences Inc.

2.3 Further Acts. Each Assignor hereby agrees and covenants to Hesperix that he/she/it will undertake all legal acts at any time necessary and at no further cost or expense to Hesperix other than those obligations under Article 3 of this Agreement (i) to vest all right, title, and interest in the Patents and Know-How in Hesperix or Hesperix's designee, (ii) to enable Hesperix or Hesperix's designee to prosecute the patents and to issue patents from the Patents, (iii) to enable Hesperix or Hesperix's designee to enforce the Patents against any infringers or to defend against any challenges to the validity or enforceability of the Patents, and (iv) to do all other acts as may be reasonable or necessary to satisfy the intent of the parties hereto.

2.4 Cooperation. The Assignors shall cooperate with Hesperix and its counsel in connection with prosecuting and maintaining the Patents, for example, by providing all pertinent information and data with respect thereto, assisting in reviewing and responding to any actions issued by any patent office, and executing applications, specifications, declarations, oaths, assignments and all similar instruments which Hesperix shall deem necessary. Assignors shall use commercially reasonable efforts at no cost to such Assignors to coordinate and procure that personnel who have knowledge of the Patents and the know-how are available for telephone discussions, and meetings with Hesperix, and facilitate to its commercially reasonable efforts meetings with the Assignors and with patent counsel, as and when reasonably required by Hesperix. The Assignors further agree that their obligation to execute or cause to be executed any such instrument or papers shall continue after the expiration of this Agreement. If Hesperix is unable for any reason to secure the Assignors' signature to apply for or to pursue any application for any United States or foreign patents assigned hereunder to Assignor, then each Inventor hereby irrevocably designates and appoints Hesperix and its duly authorized officers and agents as such Assignor's agent and attorney-in-fact, to act for and in his/her name, place and stead to execute and file any such lawful applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent thereon with the same legal force and effect as if executed by such Inventor.

ARTICLE 3 – PAYMENTS AND PAYMENT TERMS

3.1 Running Royalties. In consideration for the assignments by the Institute and Pharmsynthez of the Patents and their respective representations, warranties, and covenants made pursuant to this Agreement, and subject to the provisions herein, Hesperix shall, during the Term, pay each of the Institute and Pharmsynthez a running royalty of * percent (*%) (i.e., a total of * percent (*%) divided evenly between the Institute and Pharmsynthez) of Net Sales of Products in each country in which, in absence of this Agreement, the manufacture, use, offer for sale, sale, or importation of the Product would infringe a Valid Claim of an issued patent within the Patents. This running royalty rate will be reduced by * (*) to *percent (*%) to each of the Institute and Pharmsynthez (i.e., a total of * percent (*%) divided evenly between the Institute and Pharmsynthez) in each country in which the manufacture, use, offer for sale, sale, or importation of the Product would infringe a Valid Claim of a pending application within the Patents if such claim were a claim of an issued patent at the time of the sale of such Product but would not infringe a Valid Claim of an issued patent within the Patents. The running royalty rate will be reduced to * percent (*%) to each of the Institute and Pharmsynthez (i.e., a total of * percent (*%) divided evenly between the Institute and Pharmsynthez) for any Royalty Term under Section 3.2 which neither of the foregoing royalty rate is applicable. If Hesperix assigns the Patents to a Third Party, Hesperix will make all of the obligations of Sections 3.1–3.10 become obligations of such Third Party assignee, and upon such assignment of the Patents to such Third Party, Hesperix shall be relieved of these obligations.

Each of the Institute, and Pharmsynthez will be paid only one (1) running royalty each for each unit of Product no matter how many times such unit is sold or how many Patents, absent this Agreement, would be infringed by the manufacture, use, offer for sale, sale, or importation of such Product. All running royalties are non-refundable.

* Portions of this Exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

3.2 Royalty Term. Running royalties due under Section 3.1 will commence on the Effective Date through, on Product-by-Product and country-by-country bases, the later of (i) the expiration of the last-to-expire Patent, a Valid Claim of which would, absent this Agreement, be infringed by the manufacture, use, offer for sale, sale, or import of a Product or (ii) ten (10) years from the date of first Commercial Sale.

3.3 Royalty Payments and Reports. Running royalties under Section 3.1 shall be due forty-five (45) Calendar Days after the end of each Calendar Quarter. Each payment of running royalties under Article 3 will be accompanied by a report setting forth, on Product-by-Product and country-by-country bases, the amount of gross sales of each Product, a calculation of corresponding Net Sales and the information used to make such calculation, the currency conversion rate used (if applicable), the United States Dollar-equivalent of such Net Sales, and a calculation of the royalty payment due on such Net Sales. Such report will be considered Confidential Information of Hesperix subject to the obligations of Article 4.

3.4 Interest on Late Payments. Any payments or portions thereof due hereunder which are not paid when such payments are due under this Agreement will bear interest at the lower of (a) the U.S. Prime Rate in effect on the due date plus one (1) percentage point or (b) the maximum rate permitted by applicable Law, calculated on the number of Calendar Days such payment is delinquent; provided, that any payments or portions thereof which are disputed in good faith by the Assignee shall not incur any interest thereon unless finally resolved as provided for herein in the applicable Assignor's favor.

3.5 Currency. Royalty payments under this Agreement shall be payable in U.S. dollars and shall be paid by bank wire transfer in immediately available funds to such bank account as designated in writing by the payee. Whenever conversion from any foreign currency shall be required, such conversion shall be at the rate of exchange thereafter published in the Wall Street Journal for the Business Day closest to the end of the applicable accounting period.

3.6 Royalty Reduction. In the event Hesperix is required to obtain a license from a third party in order to avoid infringing such third party's patent(s) in the development, manufacture, use, or sale of any Product (a "Required Third Party License"). Hesperix may deduct one half of any running royalties due under Required Third Party Licenses from any royalties due under this Agreement; *provided, however*, that the royalty due under this Agreement will not be reduced in total by more than one-half.

3.7 Withholding Taxes. The Institute and Pharmsynthez will respectively be responsible for any and all of their respective income or other similar taxes owed by them and required by applicable Law to be withheld or deducted from any payments made by or on behalf of Hesperix to each of them ("Withholding Taxes"), and Hesperix may deduct from any amounts that Hesperix is required to pay hereunder an amount equal to such Withholding Taxes; provided, however, that Hesperix is required by a Governmental Authority to pay such amounts on the Institute's, or Pharmsynthez's behalf. The Institute and Pharmsynthez will provide Hesperix with any information available to the Institute or Pharmsynthez that is necessary to determine the Withholding Taxes (including any potential reduction based on an applicable income tax treaty along with necessary certification of residency for treaty benefits to apply). Such Withholding Taxes will be paid to the proper taxing authority for the Institute's or Pharmsynthez's account, as appropriate, and evidence of such payment that is satisfactory to the Institute or Pharmsynthez as appropriate, will be sent to the Institute or Pharmsynthez as appropriate, within thirty (30) Calendar Days of such payment.

3.8 Cooperation of the Parties. Hesperix, the Institute and Pharmsynthez will do all lawful acts and things and sign all lawful deeds and documents as any may reasonably request from the other(s) to enable Hesperix, the Institute, and Pharmsynthez to take advantage of any applicable legal provision or any double taxation treaties with the object of paying the sums due to the Institute, and Pharmsynthez hereunder without withholding or deducting any Withholding Taxes.

3.9 Record Retention. Hesperix will maintain complete and accurate books, records, and accounts used for the determination of expenses, deductions, credits, or other relevant factors in connection with the calculation of Net Sales, in sufficient detail to confirm the accuracy of any payments required under this Agreement, which books, records, and accounts will be retained by Hesperix until three (3) years after the end of the period to which such books, records, and accounts pertain. Hesperix agrees to allow relevant tax authorities to inspect the records contemplated under this Section 3.9 and otherwise to cooperate in responding to inquiries from tax authorities.

3.10 Audit. The Institute and Pharmsynthez will collectively have the right to have an independent certified public accounting firm have access during normal business hours, and upon reasonable prior written notice, to such of the records of Hesperix as such firm deems reasonably necessary to verify the accuracy of the calculation of Net Sales by Hesperix under this Agreement for any Calendar Quarter ending not more than three (3) years prior to the date of such request; *provided however*, that the Institute, and Pharmsynthez will not have the right to conduct more than one such audit in any twelve (12) month period and that the Institute and Pharmsynthez shall not be permitted to audit the same period of time more than once. The Institute and Pharmsynthez will bear all costs of such audit, unless the audit reveals a discrepancy in the Institute's or Pharmsynthez's, favor of more than twenty percent (20%), in which case Hesperix will bear the cost of the audit (not to exceed 50% of the amount of any underpayment). The Institute and Pharmsynthez will treat all information subject to review under this Article 3 in accordance with the provisions of Article 4 and will cause its accounting firm to enter into a reasonably acceptable confidentiality agreement with the Institute and Pharmsynthez obligating such firm to maintain all such financial information in confidence pursuant to such confidentiality agreement. The independent certified public accounting firm shall report to the Institute, Pharmsynthez, and Hesperix only the conclusions of its audit, that is whether Hesperix has accurately calculated Net Sales or the extent of the inaccuracy, unless any of the Institute, Pharmsynthez, or Hesperix, with reasonable cause, contests the accuracy of the accounting firm's calculations. In the event the independent accounting firm finds discrepancies in Hesperix's calculations of Net Sales, the independent accounting firm shall additionally promptly inform the Institute, Pharmsynthez, and Hesperix of its conclusions and the bases therefore.

3.11 Payment of Additional Amounts or Refunds. If, based on the results of any audit, additional payments are owed to the Institute, or Pharmsynthez, under this Agreement, then Hesperix will make such additional payments promptly after the accounting firm's written report is delivered to Hesperix, the Institute, and Pharmsynthez. If, based on the results of any audit, refunds are owed to Hesperix under this Agreement, then the Institute and Pharmsynthez as appropriate, will make such refunds promptly after the accounting firm's written report is delivered to Hesperix, the Institute, and Pharmsynthez. However, if any of the Institute, Pharmsynthez, or Hesperix, with reasonable cause, contests the accuracy of the accounting firm's calculations, such over or under payment may be withheld pending resolution of the disputed amount.

3.12 Allocation of Shares in Hesperix. Hesperix, Gabibov, Stepanov, Smirnov, Belogurov, Genkin, Vinogradov, and Lerner, agree that upon execution of this Agreement by all Parties, ownership of one hundred percent (100%) of the outstanding shares of Hesperix in all classes will be reallocated (whether by issuance of additional shares or otherwise) as follows and that Hesperix, Gabibov, Stepanov, Smirnov, Belogurov, Genkin, Vinogradov, Lerner, shall undertake all actions and will execute all documents necessary to complete this reallocation :

Party	Allocation upon Assignment Execution by All Parties, Rounded to two Decimal Places
Gabibov	Twelve and thirty-one hundredths percent (12.31%)
Stepanov	Four and sixty-two hundredths percent (4.62%)
Smirnov	Three and eight hundredths percent (3.08%)
Belogurov	Three and eight hundredths percent (3.08%)
Genkin	Twenty-three and eight hundredths percent (23.08%)
Lerner	Seven and sixty-nine hundredths Percent (7.69%)
Vinogradov	Forty-six and fifteen hundredths percent (46.15%)

ARTICLE 4 - CONFIDENTIALITY

4.1. Nondisclosure Obligations. For a period from the Effective Date to three (3) years after the earlier of the expiration of the Royalty Term (or termination of this Agreement by Hesperix, if Hesperix is the Disclosing Party), the Receiving Party shall maintain as confidential and shall not make any public disclosure of Confidential Information of the Disclosing Party, without the advance written permission of the Disclosing Party, which permission may be withheld by the Disclosing Party at the Disclosing Party's sole discretion; *provided, however*, that to the extent it is reasonably necessary or appropriate to fulfill its obligations or to exercise its rights under this Agreement the Receiving Party may disclose Confidential Information of the Disclosing Party to its Affiliates, its and their respective officers, directors, employees, sublicensees, consultants, outside contractors, clinical investigators, and other Third Parties, on a need-to-know basis and on the condition that such Persons agree to use the Confidential Information only for purposes specifically authorized by this Agreement and to keep the Confidential Information confidential for the same time periods and to the same extent as the Receiving Party is required to keep the Confidential Information confidential hereunder; and (ii) the Receiving Party may disclose Confidential Information to Governmental Authorities to the extent that such disclosure is reasonably necessary to obtain authorizations to conduct clinical trials or to develop or commercially market products, or as otherwise may be required by Law or pursuant to legal or regulatory process; and (iii) the Receiving Party may disclose Confidential Information to its attorneys, accountants, lenders, insurers, and advisors who are bound by a professional duty of confidentiality (so long as the Receiving Party remains responsible for any such breaches by such professionals).

4.2 Nondisclosure of the Agreement. Except as permitted by the other Sections of Article 4 or as otherwise required by Law, the Parties each agree not to disclose any terms or conditions of this Agreement to any Third Party without the prior written consent of the other Party, such consent not to be unreasonable conditioned, delayed, or withheld; *provided* that each Party shall be entitled to disclose the terms of this Agreement without such consent to (a) existing and potential investors or other financing sources on the condition that such Persons agree in writing to keep such terms confidential for the same time periods and to the same extent as such Party is required to keep such terms confidential, (b) to its attorneys, accountants and advisors who are bound by a professional duty of confidentiality (so long as the Receiving Party remains responsible for any such breaches by such professionals or other third parties), and (c) any entity that is publically traded that may acquire all or substantially all of the assets or equity interests of Hesperix, which may further disclose the terms of this Agreement or otherwise as may be required by the rules and regulations of the exchange in which it is listed.

4.3 Press Releases. No public announcement or press release containing the terms of this Agreement, except as otherwise required by Law shall be made or issued, directly or indirectly, by any Party without first obtaining the prior written approval of the other Parties. The Parties agree that any Party preparing any such press release shall provide the other Parties with a draft thereof reasonably in advance of disclosure so as to permit the other Parties to review and comment on such press release prior to any dissemination of such release.

4.4 Injunctive Relief. The Parties hereby acknowledge that a breach of their respective obligations in this Article 4 may cause irreparable harm and that the remedy or remedies at law for any such breach may be inadequate. The Parties hereby agree that, in the event of any such breach, in addition to all other available remedies hereunder, the non-breaching Party shall have the right to obtain equitable relief to enforce the provisions of this Article 4.

ARTICLE 5 - REPRESENTATIONS AND WARRANTIES

5.1 Hesperix's Representations and Warranties. Hesperix represents and warrants to the other Parties that:

- (a) Hesperix is a corporation duly organized, validly existing, and in good standing under the laws of Switzerland,;
- (b) Hesperix has the legal right, authority, and corporate power to enter into this Agreement;

(c) Hesperix has taken all necessary corporate action to authorize the execution, delivery, and performance of this Agreement;

(d) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Hesperix, enforceable against Hesperix in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(e) the performance of Hesperix's obligations under this Agreement will not conflict with its organizational documents, as amended, and will not result in a breach of any material agreements or contracts to which it is a party;

(f) Hesperix has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with its obligations under this Agreement; and

(g) this Agreement is fully binding and enforceable in accordance with its terms.

5.2 Stepanov's Representations and Warranties. Stepanov represents and warrants to the other Parties that:

(a) Stepanov is an individual;

(b) to his Knowledge, Stepanov is not an inventor, nor does he own any interest in any patents or patent application other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the in the Patents as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or, to his Knowledge, threatened (other than with respect to the Scripps Rights) in writing against Stepanov or his Affiliates.

(d) his assignment to the Institute of his right, title, and interest in and to the Patents is valid and binding;

(e) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Stepanov, enforceable against Stepanov in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(f) the performance of Stepanov's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(g) Stepanov has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(h) this Agreement is fully binding and enforceable in accordance with its terms.

5.3 Gabibov's Representations and Warranties. Gabibov represents and warrants to the other Parties that:

(a) Gabibov is an individual;

(b) to his Knowledge, Gabibov is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or to his Knowledge threatened (other than with respect to the Scripps Rights) in writing against Gabibov or his Affiliates;

(d) his assignment to the Institute of his right, title, and interest in and to the Patents is valid and binding;

(e) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Gabibov, enforceable against Gabibov in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(f) the performance of Gabibov's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(g) Gabibov has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(h) this Agreement is fully binding and enforceable in accordance with its terms.

5.4 Smirnov's Representations and Warranties. Smirnov represents and warrants to the other Parties that:

(a) Smirnov is an individual;

(b) to his Knowledge, Smirnov is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Smirnov or his Affiliates;

(d) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Smirnov, enforceable against Smirnov in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(e) the performance of Smirnov's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(f) Smirnov has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(g) this Agreement is fully binding and enforceable in accordance with its terms.

5.5 Genkin's Representations and Warranties. Genkin represents and warrants to the other Parties that:

(a) Genkin is an individual;

(b) to his Knowledge, Genkin is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Genkin or his Affiliates;

(d) his assignment to Pharmsynthez of his right, title, and interest in and to the Patents is valid and binding;

(e) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Genkin, enforceable against Genkin in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(f) the performance of Genkin's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(g) Genkin has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(h) this Agreement is fully binding and enforceable in accordance with its terms.

5.6 Lerner's Representations and Warranties. Lerner represents and warrants to the other Parties that:

(a) Lerner is an individual;

(b) to his Knowledge, Lerner is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than with respect to the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than with respect to the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Lerner or his Affiliates;

(d) his assignment to Scripps of his right, title, and interest in and to the Patents is valid and binding;

(e) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Lerner, enforceable against Lerner in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(f) the performance of Lerner's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(g) Lerner has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(h) this Agreement is fully binding and enforceable in accordance with its terms.

5.7 Belogurov's Representations and Warranties. Belogurov represents and warrants to the other Parties that:

(a) Belogurov is an individual;

(b) to his Knowledge, Belogurov is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Belogurov or his Affiliates;

(c) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Belogurov, enforceable against Belogurov in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(d) his assignment to the Institute of his right, title, and interest in and to the Patents is valid and binding;

(e) the performance of Belogurov's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(f) Belogurov has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(g) this Agreement is fully binding and enforceable in accordance with its terms.

5.8 Vinogradov's Representations and Warranties. Vinogradov represents and warrants to the other Parties that:

(a) Vinogradov is an individual;

(b) to his Knowledge, Vinogradov is not an inventor, nor does he own any interest in any patents or patent applications other than his ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date as of the Effective Date;

(c) to his Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Vinogradov or his Affiliates;

(d) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Vinogradov, enforceable against Vinogradov in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(e) the performance of Vinogradov's obligations under this Agreement will not result in a breach of any material agreements or contracts to which he is a party;

(f) Vinogradov has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with his obligations under this Agreement; and

(g) this Agreement is fully binding and enforceable in accordance with its terms.

5.9 The Institute's Representations and Warranties. The Institute represents and warrants to the other Parties that:

(a) the Institute is an educational corporation duly organized, validly existing, and in good standing under the laws of the Russian federation;

(b) to its Knowledge, the Institute does not own any patents or patent applications other than its ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to its Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against the Institute or its Affiliates;

(d) to its Knowledge, the Institute is unaware of any inventions that were invented or may be invented by members of its faculty, or other employees, other than the Assignors, that would be infringed by the making, having made, using, or selling of products claimed in the Patents, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(e) the Institute has the legal right, authority, and corporate power to enter into this Agreement;

(f) the Institute has taken all necessary corporate action to authorize the execution, delivery, and performance of this Agreement;

(g) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of the Institute, enforceable against the Institute in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(h) the performance of the Institute's obligations under this Agreement will not conflict with its organizational documents, as amended, and will not result in a breach of any material agreements or contracts to which it is a party;

(i) the Institute has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with its obligations under this Agreement and

(j) this Agreement is fully binding and enforceable in accordance with its terms.

5.10 Pharmsynthez's Representations and Warranties. Pharmsynthez represents and warrants to the other Parties that:

(a) Pharmsynthez is a public joint stock company duly organized, validly existing, and in good standing under the laws of the Russian Federation;

(b) to its Knowledge, Pharmsynthez does not own any patents or patent applications other than its ownership interest in the Patents that would be infringed by the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(c) to its Knowledge, the making, having made, using, or selling of products claimed in the Patents as of the Effective Date, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date, will not infringe any patent or any other rights of any Third Party (other than the Scripps Rights) or contribute to the infringement of other rights of any Third Party (other than the Scripps Rights) in the United States or elsewhere, and no claim, action or suit alleging any such infringement or contribution to infringement is pending (other than with respect to the Scripps Rights) or threatened (other than with respect to the Scripps Rights) in writing against Pharmsynthez or its Affiliates;

(d) to its Knowledge, Pharmsynthez is unaware of any inventions that were invented or may be invented by its employees, other than the Assignors, that would be infringed by the making, having made, using, or selling of products claimed in the Patents, or the otherwise practicing of any technology or inventions claimed in the Patents as of the Effective Date;

(e) Pharmsynthez has the legal right, authority, and corporate power to enter into this Agreement;

(f) Pharmsynthez has taken all necessary corporate action to authorize the execution, delivery, and performance of this Agreement;

(g) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of Pharmsynthez, enforceable against Pharmsynthez in accordance with its terms, except to the extent enforceability is limited by bankruptcy, insolvency or similar laws affecting creditors' rights and remedies or equitable principles;

(h) the performance of Pharmsynthez's obligations under this Agreement will not conflict with its organizational documents, as amended, and will not result in a breach of any material agreements or contracts to which it is a party;

(i) Pharmsynthez has not and will not, during the Term, enter into any material agreements or contracts that would be inconsistent with its obligations under this Agreement; and

(j) this Agreement is fully binding and enforceable in accordance with its terms.

5.11 WARRANTY DISCLAIMER. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NO PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO PATENTS AND TECHNOLOGY OR ANY MATERIALS OR INFORMATION PROVIDED TO ANY OTHER PARTY UNDER THIS AGREEMENT, OR WITH RESPECT TO ANY PRODUCTS OR SERVICES OF ANY PARTY OR THEIR RESPECTIVE AFFILIATES. FURTHERMORE, UNLESS EXPRESSLY STATED IN THIS AGREEMENT, NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A WARRANTY, EXPRESS OR IMPLIED, THAT USE BY ANY PARTY OF PATENTS OR ANY MATERIALS OR INFORMATION PROVIDED TO ANY PARTY UNDER THIS AGREEMENT, DO NOT INFRINGE ANY PATENT RIGHTS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY.

5.12 EXCLUSION OF DAMAGES; LIMITATIONS OF LIABILITY. EXCEPT FOR LIABILITY FOR BREACH OF CONFIDENTIALITY, NO PARTY SHALL BE LIABLE TO ANY OTHER PARTY HERETO FOR SPECIAL, INDIRECT, INCIDENTAL, OR PUNITIVE DAMAGES, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES RESULTING FROM LOSS OF USE, LOSS OF PROFITS, OR INTERRUPTION OR LOSS OF BUSINESS OR OTHER SIMILAR ECONOMIC LOSS) ARISING OUT OF THIS AGREEMENT OR WITH RESPECT TO A PARTY'S PERFORMANCE OR NON-PERFORMANCE HEREUNDER.

The foregoing exclusion of damages:

(i) applies even if a Party had or should have had actual or constructive knowledge of the possibility of such damages,

(ii) is a fundamental element of the basis of the bargain among the Parties, and this Agreement would not be entered into without such limitations and exclusions, and

(iii) shall apply whether an Action is based on breach of contract, breach of warranty, tort (including negligence), product liability, strict liability or otherwise, and notwithstanding any failure of essential purpose of any limited remedy herein.

The foregoing exclusion of damages is intended to apply even if there is a total and fundamental breach of this Agreement. The essential purpose of the exclusion of damages clause is to limit the Parties' respective liabilities to each other hereunder.

5.13 Essential Basis. The Parties acknowledge and agree that the disclaimers, exclusions, and limitations of liability set forth in this Article 5 form an essential basis of this Agreement, and that, absent any of such disclaimers, exclusions or limitations of liability, the terms of this Agreement, including the economic terms, would be substantially different.

5.14 Liability. Other than as expressly provided in this Agreement, each Party shall bear all risk, responsibility, and liability for all of its acts or omissions in performing its obligations under this Agreement.

If to Stepanov: Ostrovityananova street
bld. 45/2
app. 44
Moscow 117342
Russian Federation

If to Gabibov: Yauzsky Boulevard 14
App.10
Moscow 109028
Russian Federation

If to Smirnov: 2/1 Kutuzovskiy prt,
App 222
121248, Moscow,
Russian Federation

If to Vinogradov: 4, Stroiteley Str., Block 4,
App. 54,
Moscow,
Russian Federation

If to Genkin: Konstantinovsky Avenue 26
App 2
St. Petersburg 197110
Russian Federation

with a copy to: Troutman Sanders LLP
875 Third Avenue
New York, NY 10022
USA
Attn: Irina Vainberg, Ph.D., J.D.

If to Lerner: 7750 Roseland Drive
La Jolla, CA 92037
USA

If to Belogurov: Ryblevskoe shosse
bld. 9
app. 53
Moscow 121108
Russian Federation

If to the Institute: GSP-7
Ulitsa Miklukho-Maklaya, 16/10
Moscow 117997, V-437
Russian Federation

If to Pharmsynthez: 34, Liter 1, Kuzmolovsky urban-type settlement
Capitolovo station
Vsevolozhsky district
188663, Leningrad region
Russian Federation

7.3 Force Majeure. No Party shall be held liable or responsible to any 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, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any Governmental Authority; *provided, however*, that the Party so affected shall use reasonable efforts to avoid or remove such causes of non-performance, and shall continue performance hereunder with reasonable dispatch wherever or whenever such causes are removed. Each Party shall provide the other Parties with prompt written notice of any delay or failure to perform that occurs by reason of force majeure. The Parties shall mutually seek a resolution of the delay or the failure to perform in good faith.

7.4 Waivers and Modifications. The failure of any Party to insist on the performance of any obligation hereunder shall not be deemed to be a waiver of such obligation. Waiver of any breach of any provision hereof shall not be deemed to be a waiver of any other breach of such provision or any other provision. No waiver, modification, release, or amendment of any obligation under or provision of this Agreement shall be valid or effective unless in writing and signed by both Parties hereto.

7.5 Relationship of the Parties. It is expressly agreed that the relationship among the Parties shall not constitute a partnership, joint venture, or agency. The Parties are independent contractors. No Party shall have the authority to make any statements, representations, or commitments of any kind, or to take any action, which shall be binding on any other Party, without the prior written consent of such other Party to do so.

7.6 Counterparts. This Agreement may be executed in counterparts with the same effect as if all Parties had signed the same document. All such counterparts shall be deemed an original, shall be construed together, and shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

7.7 Severability. In performing this Agreement, the Parties shall comply with all applicable Laws. Wherever there is any conflict between any provision of this Agreement and any Law, the Law shall prevail, but in such event the affected provision of this Agreement shall be limited or eliminated only to the extent necessary, and the remainder of this Agreement shall remain in full force and effect. In the event the terms of this Agreement are materially altered as a result of the foregoing, the Parties shall renegotiate in good faith the terms of this Agreement to resolve any inequities.

7.8 Entire Agreement. This Agreement and the Exhibits hereto constitute the entire agreement between the Parties with respect to the subject matter hereof, and supersedes any and all oral, electronic, or written communications or understandings relating to the subject matter hereof.

7.9 Further Actions. Each Party agrees to execute, acknowledge, and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

7.10 Expenses. Except as otherwise provided herein, all costs and expenses incurred in connection with this Agreement shall be paid by the Party incurring such cost or expense.

7.10 Third Party Beneficiaries. Notwithstanding any provision herein to the contrary, no provision of this Agreement is intended to confer any rights, benefits, remedies, obligations or liabilities hereunder upon any person other than the Parties, their Affiliates where expressly stated, other indemnities where expressly stated, and their respective successors and assigns.

7.11 Governing Law. The validity, construction, and interpretation of this Agreement and any determination of the performance which this Agreement requires will be governed by and construed in accordance with the Laws of the State of New York applicable to contracts made and performed wholly within the State of New York.

7.12 Jurisdiction. Each Party hereby irrevocably and unconditionally submits, for itself and its property, to the non-exclusive jurisdiction of any New York or Federal court sitting in New York County, New York and any appellate court from any thereof; in any Action arising out of or relating to this Agreement, or for recognition or enforcement of any judgment, and each of the Parties hereby irrevocably and unconditionally agrees that all claims in respect of any such Action may be heard and determined in such New York State court, or, to the extent permitted by law, in such Federal court. Each of the Parties agrees that a final judgment in any such Action shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each of the Parties hereby irrevocably waives, to the fullest extent it may legally and effectively do so, the defense of an inconvenient forum to the maintenance of such Action in any such court, and agrees not to plead the same, and agrees that nothing herein will limit the right to sue in any other jurisdiction if a New York State or Federal court of competent jurisdiction sitting in New York County, New York rules or orders that it will not exercise jurisdiction over any such Action.

7.13 Venue. Each of the Parties hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of Action arising out of or relating to this Agreement in any court referred to in this Section 7.13.

7.14 Immunity Waiver. To the extent that a Party has or hereafter may acquire any immunity from jurisdiction of any court or from any legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution or execution, on the ground of sovereignty or otherwise) with respect to itself or its property, it hereby irrevocably waives, to the fullest extent it may legally and effectively do so, such immunity in respect of its obligations under this Agreement.

7.15 Survival. Termination or expiration of this Agreement for any reason shall not affect the accrued rights of the Parties arising in any way out of this Agreement and shall not release any Party from any liability which, at the time of such termination or expiration, has already accrued, as applicable, or which is attributable to a period prior to such termination or expiration, nor preclude any Party, as applicable, from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued or are based upon any event or series of events occurring prior to such termination or expiration. Additionally, Articles 1, 3, 4, 5, and 7 and Section 2.3 shall survive the termination or expiration of this Agreement.

IN WITNESS WHEREOF, the parties have caused their duly authorized officers to execute and deliver this Agreement as of the Effective Date.

HESPERIX SA

By: /s/ Robert Frigerio
Name: Robert Frigerio
Title: Director

ALEXEY VYACHESLAVOVICH STEPANOV

/s/ Alexey Vyacheslavovich Stepanov
An Individual

ALEXANDER GABIBOVICH GABIBOV

/s/ Alexander Gabibovich Gabibov
An Individual

IVAN VITALIEVICH SMIRNOV

/s/ Ivan Vatalievich Smirnov
An Individual

DMITRY DMITRIEVICH GENKIN

/s/ Dmitry Dmitrievch Genkin
An Individual

RICHARD A. LERNER

/s/ Richard A.Lerner
An Individual

ALEXEY ANATOLIEVICH BELOGUROV

/s/ Alexey Anatolievish Belogurov
An Individual

ALEXEY VINOGRADOV

/s/ Alexey Vinogradov
An Individual

SHEMYAKIN-OVCHINNIKOV INSTITUTE OF BIOORGANIC CHEMISTRY, RUSSIAN ACADEMY OF SCIENCES

By: /s/ Alexander Gabibov
Name: Alexander Gabibov
Title: Director

PJSC «PHARMSYNTHEZ»

By: /s/ Peter Fruglyakov
Name: Peter Fruglyakov
Title: CEO

Exhibit 1.17

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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Exhibit 2.1

ASSIGNMENT

WHEREAS,

- (ii) (1) Alexey Vyacheslavovich Stepanov, an individual residing at Ostrovityananova street, bld. 45/2, app. 44, Moscow, 117342, Russian Federation (“Stepanov”),
- (2) Alexander Gabibovich Gabibov, an individual residing at Yauzsky Boulevard 14, App.10, Moscow 109028, Russian Federation (“Gabibov”),
- (3) Dmitry Dmitrievich Genkin, an individual residing at Konstantinovsky Avenue 26, App 2, St. Petersburg 197110 Russian Federation (“Genkin”),
- (4) Richard A. Lerner, an individual, residing at 7750 Roseland Drive, La Jolla, CA 92037, USA (“Lerner”),
- (5) Alexey Anatolievich Belogurov, an individual residing at Ryblevskoe shosse, bld. 9, app. 53, Moscow 121108, Russian Federation (“Belogurov”),
- (6) Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, an educational institution, located at Miklukho-Maklaya 16/10, 117997, Moscow, V-437, Russian Federation (the “Institute”), and
- (7) PJSC «Pharmsynthez», a public joint stock company located at 134, Liter I, Kuzmolovsky urban-type settlement, Capitolovo station, Vsevolozhsky district, 188663, Leningrad region, Russia (“Pharmsynthez”) (Stepanov, Gabibov, Genkin, Lerner, Belogurov, the Institute, and Pharmsynthez, collectively “Assignors”)

collectively own or have owned all right, title, and interest in 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, Hesperix SA, a corporation registered under the laws of Switzerland, company no. CHE-434.229.465, located at via Luganetto 4, 6962, Viganello, Switzerland (“Hesperix” or “Assignee”) is desirous of acquiring Assignors’ entire right, title and interest therein, including the right to claim priority thereof, free and clear of all liens or other encumbrances of any nature whatsoever;

NOW THEREFORE, for the consideration paid by Hesperix, the receipt and sufficiency of which are hereby acknowledged, Assignors each irrevocably sell, assign, transfer, and convey unto Hesperix all of their individual right, title, and interest, if any, throughout the world in and to said Patents (including the right to sue for past infringement thereof) including in and to any patent application whether conventional, design, divisional, continuation, continuation-in-part, and continued prosecution applications, requests for continued examination, substitutions, patents of addition, reissues, renewals, or reexams thereof, and in and to all inventions thereon, preparatory to obtaining Letters Patent of the United States and patents throughout the world therefore, free and clear of all liens or other encumbrances of any nature whatsoever; and Assignors each authorize the United States Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States and request all patent authorities throughout the world to issue any and all patents anywhere in the world included in or resulting from said Patents, to Hesperix, for its interest and for the sole use and benefit of Hesperix and its assigns and legal representatives.

Each Assignor agrees that his assignment hereunder is effective from the date of his execution of this Assignment.

IN TESTIMONY WHEREOF, each Assignor sets hereunto his hand and seal on the corresponding dates below.

ALEXEY VYACHESLAVOVICH STEPANOV

An individual

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness2 signature _____

Witness2 name (Print) _____

Witness2 address _____

ALEXANDER GABIBOVICH GABIBOV

 An individual

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness2 signature _____

Witness2 name (Print) _____

Witness2 address _____

DMITRY DMITRIEVICH GENKIN

 An individual

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness2 signature _____

Witness2 name (Print) _____

Witness2 address _____

RICHARD A. LERNER

_____ Date: _____
An Individual

STATE OF:

: SS

COUNTY OF: _____

On this _____ day of _____, 2019, before me personally appeared **Richard A. Lerner**, to me known to be the person whose name is subscribed in the foregoing instrument, and who acknowledged that he executed said instrument as his free and voluntary act and for the purposes therein expressed.

Notary Public

My Commission Expires:

ALEXEY ANATOLIEVICH BELOGUROV

_____ An individual

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness2 signature _____

Witness2 name (Print) _____

Witness2 address _____

By: _____
Name:
Title:

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness 2 signature _____

Witness 2 name (Print) _____

Witness 2 address _____

PJSC «PHARMSYNTHEZ»

By: _____
Name:
Title:

Date: _____

Witness 1 signature _____

Witness 1 name (Print) _____

Witness 1 address _____

Witness 2 signature _____

Witness 2 name (Print) _____

Witness 2 address _____

EXHIBIT B

_____, 2019

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

Ladies and Gentlemen:

The undersigned signatory of this lock-up agreement (“**Lock-Up Agreement**”) understands that the Sellers and the Sellers’ Representative (as defined in the Share Purchase Agreement, which is defined below) entered into a Share Purchase Agreement dated as of March 1, 2019 (the “**Share Purchase Agreement**”) with Xenetic Biosciences, Inc., (the “**Buyer**”) providing for the acquisition by Buyer of 4,875,000 shares of common stock of Hesperix SA in exchange for the Transaction Shares (as defined in the Share Purchase Agreement).

As an inducement to Buyer to enter into the Share Purchase Agreement and the transactions contemplated thereby, the undersigned hereby agrees that the undersigned 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. The undersigned 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.

The undersigned understands that this Lock-Up Agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors, and assigns.

Very truly yours,

[SELLER NAME]

EXHIBIT C

STOCKHOLDER'S AGREEMENT

This **STOCKHOLDER'S AGREEMENT**, dated as of [●], is entered into by and between Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), and the undersigned stockholder of the Company (the "Stockholder").

WHEREAS, the parties hereto desire to provide for certain rights and obligations of the Stockholder on and after the date hereof.

WHEREAS, the Company has executed that certain Share Purchase Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Share Purchase Agreement"), by and among the Company, Hesperix SA, a Swiss corporation ("Hesperix"), and certain other parties thereto.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

Capitalized terms not otherwise defined shall have the meanings specified in the Share Purchase Agreement.

ARTICLE II

VOTING AGREEMENT

The Stockholder covenants and agrees to vote or cause to be voted, or consent or cause to be consented, all voting securities of the Company beneficially owned (as such term is defined under the Rule 13d-3 under the Securities Exchange Act of 1934, as amended), by such Stockholder, directly or indirectly from time to time and at all times, in favor of the slate of nominees recommended by the board of directors of the Company for election as directors during the term of this Agreement, whether such matter is brought before any meeting of the stockholders of the Company however called, proposed to be taken by written consent of the stockholders of the Company or otherwise

ARTICLE III

MISCELLANEOUS

3.1. Termination.

This Agreement shall terminate and be of no further force and effect upon the earlier of (i) the date on which the Stockholder no longer beneficially owns equity stock of the Company and (ii) the written agreement of the Stockholder and the Company to terminate this Agreement.

3.2. Successors and Assigns; Beneficiaries.

Except as otherwise provided herein, all of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of, and shall be enforceable by the respective transferees, successors, and assignees of the parties hereto and any of their respective transferees, successors, or assignees. This Agreement may be assigned only with the express prior written consent of the other party hereto, *provided*, such assignee executes a joinder agreeing to be bound by the terms of this Agreement in the same capacity as the assigning party. Any attempted assignment, without such consent, will be void ab initio.

3.3. Amendment and Modification; Waiver of Compliance.

(a) This Agreement may be amended only by a written instrument duly executed by the Company and the Stockholder, to amend this Agreement.

(b) Except as otherwise provided in this Agreement, any failure of any of the parties to comply with any obligation, covenant, agreement or condition herein may be waived by the party entitled to the benefits thereof only by a written instrument signed by the party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

3.4. Notices.

Any notice, request, claim, demand, document and other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile, or first class mail, or by Federal Express, United Parcel Service or other similar courier or other similar means of communication (i) to the Stockholder, to its address set forth on the signature page hereto, or (ii) to the Company, to:

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

with a copy to:

Akerman LLP
350 East Las Olas Blvd.
Suite 1600
Fort Lauderdale, Florida 33301
Facsimile: (954) 463-2224
Email: Teddy.Klinghoffer@Akerman.com
Andrea.Fisher@Akerman.com
Attn: Teddy Klinghoffer, Esq.
Andrea Fisher Evans, Esq.

or, in each case, to such other address as such party may designate in writing to the other parties by written notice given in the manner specified herein.

3.5. Specific Performance.

Each party hereto acknowledges and agrees that in the event of any breach of this Agreement by any of them, the other parties hereto would be irreparably harmed and could not be made whole by monetary damages. Each party accordingly agrees to waive the defense in any action for specific performance that a remedy at law would be adequate and agrees that the parties, in addition to any other remedy to which they may be entitled at law or in equity, shall be entitled to specific performance of this Agreement without the posting of bond.

3.6. Entire Agreement.

The provisions of this Agreement and the other writings referred to herein or delivered pursuant hereto which form a part hereof contain the entire agreement among the parties hereto with respect to the subject matter hereof and supersede all prior oral and written agreements and memoranda and undertakings among the parties hereto with regard to such subject matter.

3.7. Severability.

If any provision of this Agreement, or the application of such provision to any Person or circumstance or in any jurisdiction, shall be held to be invalid or unenforceable to any extent, (i) the remainder of this Agreement shall not be affected thereby, and each other provision hereof shall be valid and enforceable to the fullest extent permitted by law, (ii) as to such Person or circumstance or in such jurisdiction such provision shall be reformed to be valid and enforceable to the fullest extent permitted by law and (iii) the application of such provision to other Persons or circumstances or in other jurisdictions shall not be affected thereby.

3.8. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada without regard to conflicts of law principles thereof.

3.9. Waiver of Jury Trial.

EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES OR ANY OF THEM IN RESPECT OF THIS AGREEMENT. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (i) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (ii) EACH SUCH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (iii) EACH SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (iv) EACH SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE WAIVERS AND CERTIFICATIONS IN THIS SECTION. EACH PARTY AGREES THAT THE OTHER MAY FILE A COPY OF THIS AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

3.10. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.11. Further Assurances.

At any time or from time to time after the date hereof, the parties hereto agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as any other party may reasonably request in order to evidence or effectuate the provisions of this Agreement and to otherwise carry out the intent of the parties hereunder.

* * * * *

IN WITNESS WHEREOF, each of the undersigned has signed this Agreement as of the date first above written.

COMPANY:

Xenetic Biosciences, Inc.

By: _____
Name:
Title:

STOCKHOLDER:

By: _____
Name:
Number of Shares Beneficially Owned: _____
Address: _____

[Signature Page to Stockholder's Agreement]

ASSIGNMENT AGREEMENT

between

XENETIC BIOSCIENCES, INC.,

and

OPKO PHARMACEUTICALS, LLC

dated as of

March 1, 2019

TABLE OF CONTENTS

ARTICLE I	DEFINITIONS	1
ARTICLE II	PURCHASE AND SALE; PURCHASE PRICE; CLOSING; TAX TREATMENT	6
Section 2.01	Purchase and Sale	6
Section 2.02	Consideration	6
Section 2.03	Transactions to be Effected at the Closing	7
Section 2.04	Closing	7
Section 2.05	Tax Treatment	7
Section 2.06	Withholding Tax	7
ARTICLE III	REPRESENTATIONS AND WARRANTIES OF OPKO	8
Section 3.01	Organization and Authority of the Company	8
Section 3.02	Conflicts; Approvals of Third Parties	8
Section 3.03	Intellectual Property	8
Section 3.04	Legal Proceedings; Governmental Orders	11
Section 3.05	Compliance With Laws; Permits	11
Section 3.06	Full Disclosure	11
Section 3.07	Independent Investigation	12
Section 3.08	Investor Representations	12
ARTICLE IV	REPRESENTATIONS AND WARRANTIES OF BUYER	12
Section 4.01	Organization and Authority of Buyer	12
Section 4.02	No Conflicts; Approvals	13
Section 4.03	Brokers	13
Section 4.04	Legal Proceedings	13
Section 4.05	Issuance of Transaction Shares	13
Section 4.06	Buyer SEC Reports; Financial Statements	14
Section 4.07	Tax Matters	14
ARTICLE V	COVENANTS	15

Section 5.01	Conduct of Business Prior to the Closing	15
Section 5.02	Notice of Certain Events	15
Section 5.03	Confidentiality	16
Section 5.04	Closing Conditions	16
Section 5.05	Stockholders' Meeting; Buyer Domestication	16
Section 5.06	Transaction Filings	17
Section 5.07	Listing Application	18
Section 5.08	Public Announcements	18
Section 5.09	Further Assurances	18
Section 5.10	No Termination of IP License Agreement	18
ARTICLE VI CONDITIONS TO CLOSING		18
Section 6.01	Conditions to Obligations of All Parties	18
Section 6.02	Conditions to Obligations of Buyer	19
Section 6.03	Conditions to Obligations of the Company	20
ARTICLE VII INDEMNIFICATION		21
Section 7.01	Survival	21
Section 7.02	Indemnification By Company	21
Section 7.03	Indemnification By Buyer	21
Section 7.04	Certain Limitations	22
Section 7.05	Indemnification Procedures	22
Section 7.06	Payments	24
Section 7.07	Exclusive Remedies	24
ARTICLE VIII TERMINATION		25
Section 8.01	Termination	25
Section 8.02	Effect of Termination	25
ARTICLE IX MISCELLANEOUS		26
Section 9.01	Expenses	26
Section 9.02	Notices	26
Section 9.03	Interpretation	27

Section 9.04	Headings	27
Section 9.05	Severability	27
Section 9.06	Entire Agreement	27
Section 9.07	Successors and Assigns	28
Section 9.08	No Third-party Beneficiaries	28
Section 9.09	Amendment and Modification; Waiver	28
Section 9.10	Governing Law; Submission to Jurisdiction; Waiver of Jury Trial	28
Section 9.11	Specific Performance	29
Section 9.12	Prevailing Party Fees	29
Section 9.13	Counterparts	29

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

To be filed with the Securities and Exchange Commission at a later date under separate cover.

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.

VOTING AGREEMENT

This **VOTING AGREEMENT** (this "Agreement"), dated as of March 1, 2019 is entered into by and among (i) Xenetic Biosciences, Inc., a Nevada corporation (the "Company") and (ii) the Stockholder of the Company a signatory hereto (the "Stockholder").

WHEREAS, the parties hereto desire to provide for certain rights and obligations of the Stockholder on and after the date hereof.

WHEREAS, the Company has executed that certain Share Purchase Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Share Purchase Agreement"), by and among the Company, Hesperix SA, a Swiss corporation, and certain other parties thereto.

WHEREAS, the Company has executed that certain Assignment Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Assignment Agreement"), by and among the Company and the Stockholder.

WHEREAS, the Stockholder, either itself or through its affiliates, beneficially owns and has sole or shared voting power with respect to the number of voting shares of the Company indicated opposite the Stockholder's name on Schedule 1 attached hereto.

WHEREAS, as a condition and an inducement to the Company's willingness to enter into the Share Purchase Agreement, the Stockholder has agreed to entered into this Agreement with the Company.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

Capitalized terms not otherwise defined shall have the meanings specified in the Share Purchase Agreement.

ARTICLE II

VOTING AGREEMENT

Stockholder covenants and agrees to vote (or cause to be voted) or deliver a written consent (or cause a written consent to be delivered) all voting securities of the Company owned or held by such Stockholder, directly or indirectly, as of the date hereof and all shares subsequently acquired by such Stockholder by any means, including, without limitation, upon exercise of any stock option, warrant or similar purchase right, in favor of (i) the approval and adoption of the Assignment Agreement and the Share Purchase Agreement and the Transactions contemplated thereby, (ii) the approval of the Domestication (as defined in the Share Purchase Agreement), to the extent Company, in its discretion, determines that such Domestication will be effectuated, (iii) the approval of the Buyer Financing (as defined in the Share Purchase Agreement), (iv) the election of Dr. Alexey Vinogradov to the board of directors of the Company, and (v) the approval of the issuance of Transaction Shares (as defined in the Share Purchase Agreement) in connection with the transactions contemplated by the Share Purchase Agreement and issuance of the Company Common Stock in connection with the Assignment Agreement as necessary under the rules and regulations of Nasdaq.

ARTICLE III

MISCELLANEOUS

3.1. Termination.

This Agreement will terminate upon the earlier of (i) the closing of the transactions contemplated by the Share Purchase Agreement, (ii) such date and time as the Share Purchase Agreement shall be terminated pursuant to Article X thereof or otherwise, and (iii) upon mutual written agreement of the Company and the Stockholder.

3.2. Successors and Assigns; Beneficiaries.

Except as otherwise provided herein, all of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the respective successors and permitted assigns of the parties hereto and any of their respective successors and permitted assigns. This Agreement may not be assigned without the express prior written consent of the other parties hereto, and any attempted assignment, without such consents, will be null and void.

3.3. Amendment and Modification; Waiver of Compliance.

(a) This Agreement may be amended only by a written instrument duly executed by the Company and the Stockholder, to amend this Agreement.

(b) Except as otherwise provided in this Agreement, any failure of any of the parties to comply with any obligation, covenant, agreement or condition herein may be waived by the party entitled to the benefits thereof only by a written instrument signed by the party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

3.4. Notices.

Any notice, request, claim, demand, document and other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile, or first class mail, or by Federal Express, United Parcel Service or other similar courier or other similar means of communication (i) to the Stockholder, at its address set forth on Schedule 1 hereto, as applicable, or (ii) to the Company, to:

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

with a copy to:

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

or, in each case, to such other address as such party may designate in writing to the other parties by written notice given in the manner specified herein.

3.5. Specific Performance.

Each party hereto acknowledges and agrees that in the event of any breach of this Agreement by any of them, the other parties hereto would be irreparably harmed and could not be made whole by monetary damages. Each party accordingly agrees to waive the defense in any action for specific performance that a remedy at law would be adequate and agrees that the parties, in addition to any other remedy to which they may be entitled at law or in equity, shall be entitled to specific performance of this Agreement without the posting of bond.

3.6. Entire Agreement.

The provisions of this Agreement and the other writings referred to herein or delivered pursuant hereto which form a part hereof contain the entire agreement among the parties hereto with respect to the subject matter hereof and supersede all prior oral and written agreements and memoranda and undertakings among the parties hereto with regard to such subject matter.

3.7. Severability.

If any provision of this Agreement, or the application of such provision to any Person or circumstance or in any jurisdiction, shall be held to be invalid or unenforceable to any extent, (i) the remainder of this Agreement shall not be affected thereby, and each other provision hereof shall be valid and enforceable to the fullest extent permitted by law, (ii) as to such Person or circumstance or in such jurisdiction such provision shall be reformed to be valid and enforceable to the fullest extent permitted by law and (iii) the application of such provision to other Persons or circumstances or in other jurisdictions shall not be affected thereby.

3.8. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada without regard to conflicts of law principles thereof.

3.9. Waiver of Jury Trial.

EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES OR ANY OF THEM IN RESPECT OF THIS AGREEMENT. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (i) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (ii) EACH SUCH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (iii) EACH SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (iv) EACH SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE WAIVERS AND CERTIFICATIONS IN THIS SECTION. EACH PARTY AGREES THAT THE OTHER MAY FILE A COPY OF THIS AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

3.10. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.11. Further Assurances.

At any time or from time to time after the date hereof, the parties hereto agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as any other party may reasonably request in order to evidence or effectuate the provisions of this Agreement and to otherwise carry out the intent of the parties hereunder.

* * * * *

IN WITNESS WHEREOF, each of the undersigned has signed this Agreement as of the date first above written.

COMPANY:

Xenetic Biosciences, Inc.

By: /s/ Jeffrey F. Eisenberg
Name: Jeffrey F. Eisenberg
Title: CEO

STOCKHOLDER:

PJSC «PHARMSYNTHEZ»

By: /s/ Peter Fruglyakov
Name: Peter Fruglyakov
Title: CEO

[Signature Page to Voting Agreement]

SCHEDULE 1

STOCKHOLDERS

Stockholder	Address	Number of Shares Owned
PJSC «PHARMSYNTHEZ»	134, Liter 1, Kuzmolovsky urban-type settlement, Capitолоvo station, Vsevolozhsky district, 188663, Leningrad region, Russian Federation	5,365,455

VOTING AGREEMENT

This **VOTING AGREEMENT** (this "Agreement"), dated as of March 1, 2019 is entered into by and among (i) Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), and (ii) the Stockholder of the Company as signatory hereto (the "Stockholder").

WHEREAS, the parties hereto desire to provide for certain rights and obligations of the Stockholder on and after the date hereof.

WHEREAS, the Company has executed that certain Share Purchase Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Share Purchase Agreement"), by and among the Company, Hesperix SA, a Swiss corporation, and certain other parties thereto.

WHEREAS, the Company has executed that certain Assignment Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Assignment Agreement"), by and among the Company and the Stockholder.

WHEREAS, the Stockholder, either itself or through its affiliates, beneficially owns and has sole or shared voting power with respect to the number of voting shares of the Company indicated opposite the Stockholder's name on Schedule 1 attached hereto.

WHEREAS, as a condition and an inducement to the Company's willingness to enter into the Assignment Agreement, the Stockholder has agreed to entered into this Agreement with the Company.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

Capitalized terms not otherwise defined shall have the meanings specified in the Assignment Agreement.

ARTICLE II

VOTING AGREEMENT

2.1. Voting in Connection with the Assignment Agreement.

For the period commencing on the date hereof until the earlier of (i) the closing of the transactions contemplated by the Assignment Agreement, (ii) such date and time as the Assignment Agreement shall be terminated pursuant to Article VIII thereof or otherwise, and (iii) upon mutual written agreement of the Company and the Stockholder, the Stockholder covenants and agrees to vote (or cause to be voted) or deliver a written consent (or cause a written consent to be delivered) all voting securities of the Company owned or held by such Stockholder, directly or indirectly, as of the date hereof and all shares subsequently acquired by such Stockholder by any means, including, without limitation, upon exercise of any stock option, warrant or similar purchase right, in favor of (v) the approval and adoption of the Assignment Agreement and the Share Purchase Agreement and the Transactions contemplated thereby, (w) the approval of the Domestication (as defined in the Assignment Agreement), to the extent Company, in its discretion, determines that such Domestication will be effectuated, (x) the approval of the Buyer Financing (as defined in the Assignment Agreement), (y) the election of Dr. Alexey Vinogradov to the board of directors of the Company, and (z) the approval of the issuance of Transaction Shares (as defined in the Assignment Agreement) in connection with the transactions contemplated by the Assignment Agreement and issuance of the Company Common Stock in connection with the Share Purchase Agreement as necessary under the rules and regulations of Nasdaq.

2.2. Voting of Directors.

For the period commencing on the closing of the transactions contemplated by the Assignment Agreement and until the earlier of (i) the date on which the Stockholder no longer beneficially owns equity stock of the Company and (ii) the mutual written agreement of the Company and the Stockholder, the Stockholder covenants and agrees to vote or cause to be voted, or consent or cause to be consented, all voting securities of the Company beneficially owned (as such term is defined under the Rule 13d-3 under the Securities Exchange Act of 1934, as amended), by such Stockholder, directly or indirectly from time to time and at all times, in favor of the slate of nominees recommended by the board of directors of the Company for election as directors during the term of this Agreement, whether such matter is brought before any meeting of the stockholders of the Company however called, proposed to be taken by written consent of the stockholders of the Company or otherwise.

ARTICLE III

MISCELLANEOUS

3.1. Successors and Assigns; Beneficiaries.

Except as otherwise provided herein, all of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the respective successors and permitted assigns of the parties hereto and any of their respective successors and permitted assigns. This Agreement may not be assigned without the express prior written consent of the other parties hereto, and any attempted assignment, without such consents, will be null and void.

3.2. Amendment and Modification; Waiver of Compliance.

(a) This Agreement may be amended only by a written instrument duly executed by the Company and the Stockholder, to amend this Agreement.

(b) Except as otherwise provided in this Agreement, any failure of any of the parties to comply with any obligation, covenant, agreement or condition herein may be waived by the party entitled to the benefits thereof only by a written instrument signed by the party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

3.3. Notices.

Any notice, request, claim, demand, document and other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile, or first class mail, or by Federal Express, United Parcel Service or other similar courier or other similar means of communication (i) to the Stockholder, at its address set forth on Schedule 1 hereto, as applicable, or (ii) to the Company, to:

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

with a copy to:

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

or, in each case, to such other address as such party may designate in writing to the other parties by written notice given in the manner specified herein.

3.4. Specific Performance.

Each party hereto acknowledges and agrees that in the event of any breach of this Agreement by any of them, the other parties hereto would be irreparably harmed and could not be made whole by monetary damages. Each party accordingly agrees to waive the defense in any action for specific performance that a remedy at law would be adequate and agrees that the parties, in addition to any other remedy to which they may be entitled at law or in equity, shall be entitled to specific performance of this Agreement without the posting of bond.

3.5. Entire Agreement.

The provisions of this Agreement and the other writings referred to herein or delivered pursuant hereto which form a part hereof contain the entire agreement among the parties hereto with respect to the subject matter hereof and supersede all prior oral and written agreements and memoranda and undertakings among the parties hereto with regard to such subject matter.

3.6. Severability.

If any provision of this Agreement, or the application of such provision to any Person or circumstance or in any jurisdiction, shall be held to be invalid or unenforceable to any extent, (i) the remainder of this Agreement shall not be affected thereby, and each other provision hereof shall be valid and enforceable to the fullest extent permitted by law, (ii) as to such Person or circumstance or in such jurisdiction such provision shall be reformed to be valid and enforceable to the fullest extent permitted by law and (iii) the application of such provision to other Persons or circumstances or in other jurisdictions shall not be affected thereby.

3.7. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada without regard to conflicts of law principles thereof.

3.8. Waiver of Jury Trial.

EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES OR ANY OF THEM IN RESPECT OF THIS AGREEMENT. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (i) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (ii) EACH SUCH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (iii) EACH SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (iv) EACH SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE WAIVERS AND CERTIFICATIONS IN THIS SECTION. EACH PARTY AGREES THAT THE OTHER MAY FILE A COPY OF THIS AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

3.9. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.10. Further Assurances.

At any time or from time to time after the date hereof, the parties hereto agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as any other party may reasonably request in order to evidence or effectuate the provisions of this Agreement and to otherwise carry out the intent of the parties hereunder.

* * * * *

IN WITNESS WHEREOF, each of the undersigned has signed this Agreement as of the date first above written.

COMPANY:

Xenetic Biosciences, Inc.

By: /s/ Jeffrey F. Eisenberg
Name: Jeffrey F. Eisenberg
Title: CEO

STOCKHOLDER:

OPKO PHARMACEUTICALS, LLC

By: /s/ Dr. Phillip Frost
Name: Dr. Phillip Frost
Title: Chairman & Chief Executive Officer

[Signature Page to Voting Agreement]

SCHEDULE 1

STOCKHOLDERS

Stockholder	Address	Number of Shares Owned
OPKO PHARMACEUTICALS, LLC	4400 Biscayne Boulevard, Miami, FL 33137, USA	402,215

VOTING AGREEMENT

This **VOTING AGREEMENT** (this "Agreement"), dated as of March 1, 2019 is entered into by and among (i) Xenetic Biosciences, Inc., a Nevada corporation (the "Company") and (ii) the Stockholder of the Company a signatory hereto (the "Stockholder").

WHEREAS, the parties hereto desire to provide for certain rights and obligations of the Stockholder on and after the date hereof.

WHEREAS, the Company has executed that certain Share Purchase Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Share Purchase Agreement"), by and among the Company, Hesperix SA, a Swiss corporation, and certain other parties thereto.

WHEREAS, the Company has executed that certain Assignment Agreement, dated as of the date hereof (as the same may be amended, modified, supplemented, refinanced or replaced from time to time, the "Assignment Agreement"), by and among the Company and the Stockholder.

WHEREAS, the Stockholder, either himself or through his affiliates, beneficially owns and has sole or shared voting power with respect to the number of voting shares of the Company indicated opposite the Stockholder's name on Schedule 1 attached hereto.

WHEREAS, as a condition and an inducement to the Company's willingness to enter into the Share Purchase Agreement, the Stockholder has agreed to entered into this Agreement with the Company.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

Capitalized terms not otherwise defined shall have the meanings specified in the Share Purchase Agreement.

ARTICLE II

VOTING AGREEMENT

Stockholder covenants and agrees to vote (or cause to be voted) or deliver a written consent (or cause a written consent to be delivered) all voting securities of the Company owned or held by such Stockholder, directly or indirectly, as of the date hereof and all shares subsequently acquired by such Stockholder by any means, including, without limitation, upon exercise of any stock option, warrant or similar purchase right, in favor of (i) the approval and adoption of the Assignment Agreement and the Share Purchase Agreement and the Transactions contemplated thereby, (ii) the approval of the Domestication (as defined in the Share Purchase Agreement), to the extent Company, in its discretion, determines that such Domestication will be effectuated, (iii) the approval of the Buyer Financing (as defined in the Share Purchase Agreement), (iv) the election of Dr. Alexey Vinogradov to the board of directors of the Company, and (v) the approval of the issuance of Transaction Shares (as defined in the Share Purchase Agreement) in connection with the transactions contemplated by the Share Purchase Agreement and issuance of the Company Common Stock in connection with the Assignment Agreement as necessary under the rules and regulations of Nasdaq.

ARTICLE III

MISCELLANEOUS

3.1. Termination.

This Agreement will terminate upon the earlier of (i) the closing of the transactions contemplated by the Share Purchase Agreement, (ii) such date and time as the Share Purchase Agreement shall be terminated pursuant to Article X thereof or otherwise, and (iii) upon mutual written agreement of the Company and the Stockholder.

3.2. Successors and Assigns; Beneficiaries.

Except as otherwise provided herein, all of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the respective successors and permitted assigns of the parties hereto and any of their respective successors and permitted assigns. This Agreement may not be assigned without the express prior written consent of the other parties hereto, and any attempted assignment, without such consents, will be null and void.

3.3. Amendment and Modification; Waiver of Compliance.

(a) This Agreement may be amended only by a written instrument duly executed by the Company and the Stockholder, to amend this Agreement.

(b) Except as otherwise provided in this Agreement, any failure of any of the parties to comply with any obligation, covenant, agreement or condition herein may be waived by the party entitled to the benefits thereof only by a written instrument signed by the party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

3.4. Notices.

Any notice, request, claim, demand, document and other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile, or first class mail, or by Federal Express, United Parcel Service or other similar courier or other similar means of communication (i) to the Stockholder, at its address set forth on Schedule 1 hereto, as applicable, or (ii) to the Company, to:

Xenetic Biosciences, Inc.
40 Speen Street, Suite 102
Framingham, MA 01701
Attn: Special Committee
Jeffrey F. Eisenberg, Chief Executive Officer
with a copy to:

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

or, in each case, to such other address as such party may designate in writing to the other parties by written notice given in the manner specified herein.

3.5. Specific Performance.

Each party hereto acknowledges and agrees that in the event of any breach of this Agreement by any of them, the other parties hereto would be irreparably harmed and could not be made whole by monetary damages. Each party accordingly agrees to waive the defense in any action for specific performance that a remedy at law would be adequate and agrees that the parties, in addition to any other remedy to which they may be entitled at law or in equity, shall be entitled to specific performance of this Agreement without the posting of bond.

3.6. Entire Agreement.

The provisions of this Agreement and the other writings referred to herein or delivered pursuant hereto which form a part hereof contain the entire agreement among the parties hereto with respect to the subject matter hereof and supersede all prior oral and written agreements and memoranda and undertakings among the parties hereto with regard to such subject matter.

3.7. Severability.

If any provision of this Agreement, or the application of such provision to any Person or circumstance or in any jurisdiction, shall be held to be invalid or unenforceable to any extent, (i) the remainder of this Agreement shall not be affected thereby, and each other provision hereof shall be valid and enforceable to the fullest extent permitted by law, (ii) as to such Person or circumstance or in such jurisdiction such provision shall be reformed to be valid and enforceable to the fullest extent permitted by law and (iii) the application of such provision to other Persons or circumstances or in other jurisdictions shall not be affected thereby.

3.8. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada without regard to conflicts of law principles thereof.

3.9. Waiver of Jury Trial.

EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES OR ANY OF THEM IN RESPECT OF THIS AGREEMENT. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (i) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (ii) EACH SUCH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (iii) EACH SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (iv) EACH SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE WAIVERS AND CERTIFICATIONS IN THIS SECTION. EACH PARTY AGREES THAT THE OTHER MAY FILE A COPY OF THIS AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

3.10. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.11. Further Assurances.

At any time or from time to time after the date hereof, the parties hereto agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as any other party may reasonably request in order to evidence or effectuate the provisions of this Agreement and to otherwise carry out the intent of the parties hereunder.

* * * * *

IN WITNESS WHEREOF, each of the undersigned has signed this Agreement as of the date first above written.

COMPANY:

Xenetic Biosciences, Inc.

By: /s/ Jeffrey F. Eisenberg

Name: Jeffrey F. Eisenberg

Title: CEO

STOCKHOLDER:

/s/ Dr. Dmitry Dmitrievich Genkin

Dr. Dmitry Dmitrievich Genkin

[Signature Page to Voting Agreement]

SCHEDULE 1

STOCKHOLDERS

Stockholder	Address	Number of Shares Owned
Dr. Dmitry Dmitrievich Genkin	Konstantinovsky Avenue 26, App 2, St. Petersburg 197110 Russian Federation	32,000



Xenetic Biosciences, Inc. (NASDAQ: XBIO) Announces Agreement to Acquire Innovative CAR T Technology Platform

- Innovative XCART platform with demonstrated proof of mechanism and preclinical evidence of target specificity positions Xenetic to address high value oncology market with differentiated CAR T technology*
- XCART technology platform designed to target personalized, patient-specific tumor neoantigens*
- XCART expected to initially target B-cell lymphomas and has the potential to address multiple tumor types with an initial global market opportunity in Non-Hodgkin Lymphoma of over \$5 billion annually*

LEXINGTON, MA - (March 4, 2019) – Xenetic Biosciences, Inc. (NASDAQ: XBIO) (“Xenetic” or the “Company”), a clinical-stage biopharmaceutical company focused on the discovery, research and development of next-generation biologic drugs and novel orphan oncology therapeutics, announced today its 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. The XCART technology, developed by The Scripps Research Institute (“Scripps”) in collaboration with the Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, is believed to have the potential to significantly enhance the safety and efficacy of cell therapy for B-cell lymphomas by generating patient- and tumor-specific CAR T cells. The acquisition is subject to conditions typical for a transaction of this kind, including appropriate stockholder approvals, and is expected to close in the first half of 2019.

“This acquisition is a transformative step in the strategic evolution of Xenetic,” commented Jeffrey Eisenberg, Chief Executive Officer of Xenetic. “With this novel and differentiated CAR T technology, we are now positioned in a field that is at the forefront in the development of new oncology therapeutics, which we believe will drive significant value for shareholders. The XCART platform was designed to target personalized, patient-specific tumor neoantigens and has demonstrated promising preclinical data in an area of significant unmet medical need. Our R&D efforts will focus initially on leveraging the XCART platform to develop cell-based therapeutics for the treatment of B-cell Non-Hodgkin lymphomas, an initial global market opportunity estimated to exceed \$5 billion per year¹.”

The XCART technology platform was designed by its originators to utilize an established screening technique to identify peptide ligands that bind specifically to the unique B-cell receptor (“BCR”) on the surface of an individual patient’s malignant tumor cells. The peptide is then inserted into the antigen-binding domain of a CAR, and a subsequent transduction/transfection process is used to engineer the patient’s T cells into a CAR T format which redirects the patient’s T cells to attack the tumor. Essentially, the XCART screening platform is the inverse of a typical CAR T screening protocol wherein libraries of highly specific antibody domains are screened against a given target. In the case of XCART screening, the target is itself an antibody domain, and hence highly specific by its nature. The XCART technology creates the possibility of personalized treatment of lymphomas utilizing a CAR with an antigen-binding domain that should only recognize, and only be recognized by, the unique BCR of a particular patient’s B-cell lymphoma.

¹ Market Reports World GLOBAL NON-HODGKIN LYMPHOMA THERAPEUTICS MARKET - SEGMENTED BY TYPE OF TREATMENT - GROWTH, TRENDS AND FORECASTS (2018 - 2023); BioPharm Insight Surveillance, Epidemiology, and End Results (SEER) 9 registries, National Cancer Institute, 2017



Matthew John Frigault, M.D., a member of Xenetic's Scientific Advisory Board and medical oncologist in the Hematologic Malignancy Program at the Massachusetts General Hospital Cancer Center, Assistant Director of the Cellular Therapy Service, and Instructor at Harvard Medical School commented, "Adoptive cell therapy, and CAR T in particular, has been an area of great interest in recent years, and an area that I have built my career around. There are a number of CAR T products in development and the existing therapies can be highly efficacious, but not all patients respond, and the side effects can be frequent and serious, even life threatening."

An expected result for XCART is limited off-tumor toxicities, such as B-cell aplasia. Xenetic's clinical development program will seek to confirm the early preclinical results, and to demonstrate a more attractive safety profile than existing therapies.

Under the terms of the transaction, Xenetic will acquire all outstanding shares of Hesperix S.A., a newly-formed Swiss entity to which all XCART owners and inventors other than Scripps have assigned their rights to XCART, and will exclusively license Scripps' rights in the technology, in exchange for an aggregate 7,500,000 shares of Xenetic common stock.

About Xenetic Biosciences

Xenetic Biosciences, Inc. is a clinical-stage biopharmaceutical company focused on the discovery, research and development of next-generation biologic drugs and novel orphan oncology therapeutics. The Company recently announced its plans to acquire the XCART platform, a novel CAR T technology engineered to target personalized, patient-specific tumor neoantigens. The transaction is expected to close in the first half of 2019, and the Company plans to initially apply the XCART technology to develop cell-based therapeutics for the treatment of B-cell lymphomas.

Xenetic's Phase 2 oncology asset, XBIO-101 (sodium cridanimod), is a small-molecule investigational immunomodulator and interferon inducer which, in exploratory clinical studies, has also been shown to increase progesterone receptor (PrR) and estrogen receptor (ER) expression in certain tumor tissues. The Company plans to pursue collaborations with immuno-oncology (I-O) companies in which it would seek to use XBIO-101 in combination with approved or developmental I-O compounds such as checkpoint inhibitors. Additionally, Xenetic's proprietary drug development platform, PolyXen™, enables next-generation biologic drugs by improving their half-life and other pharmacological properties. The Company has ongoing business development activities to explore partnerships utilizing its PolyXen delivery platform.

For more information, please visit the company's website at www.xeneticbio.com and connect on Twitter, LinkedIn, and Facebook.

ADDITIONAL INFORMATION AND WHERE TO FIND IT

In connection with the acquisition, the Company will file with the Securities and Exchange Commission (the "SEC"), a registration statement on Form S-4 that will include a combined 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 acquisition. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ CAREFULLY AND IN THEIR ENTIRETY THESE DOCUMENTS WHEN THEY BECOME AVAILABLE, ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, AND OTHER DOCUMENTS FILED BY THE COMPANY WITH THE SEC IN CONNECTION WITH THE ACQUISITION, BECAUSE THESE DOCUMENTS WILL 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 will also be able to 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 acquisition. Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of proxies in connection with the acquisition, 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, 2017, which was filed with the SEC on March 30, 2018, its Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018, and September 30, 2018 which were filed with the SEC on May 15, 2018, August 10, 2018, and November 9, 2018, respectively, and certain of its Current Reports filed on Form 8-K. These documents can be obtained free of charge from the sources indicated above.

Forward-Looking Statements

This press release contains forward-looking statements for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release other than statements of historical facts may constitute forward-looking statements within the meaning of the federal securities laws. These statements can be identified by words such as "expects," "plans," "projects," "will," "may," "anticipates," "believes," "should," "intends," "estimates," and other words of similar meaning. Any forward-looking statements contained herein are based on current expectations, and are subject to a number of risks and uncertainties. These forward-looking statements include, but are not limited to, statements regarding the acquisition and development of the CAR T technology. Many factors could cause our actual activities or results to differ materially from the activities and results anticipated in forward-looking statements. Important factors that could cause actual results to differ materially from such plans, estimates or expectations include, among others, (1) that one or more closing conditions to the acquisition, including certain regulatory approvals, may not be satisfied or waived, on a timely basis or otherwise, or that the required approval by the stockholders of the Company may not be obtained; (2) the condition that the Company have adequate financing to fund its future working capital obligations may not be met; (3) the risk that the acquisition may not be completed on the terms or in the time frame expected by the Company, or at all; (4) unexpected costs, charges or expenses resulting from the acquisition; (5) uncertainty of the expected financial performance of the Company following completion of the acquisition; (6) failure to realize the anticipated benefits of the acquisition; (7) the ability of the Company to implement its business strategy; (8) the occurrence of any event that could give rise to termination of the acquisition; and (9) other risk factors as detailed from time to time in the Company's reports filed with the SEC, including its annual report on Form 10-K, periodic quarterly reports on Form 10-Q, periodic current reports on Form 8-K and other documents filed with the SEC. The foregoing list of important factors is not exclusive. In addition, forward-looking statements may also be adversely affected by general market factors, competitive product development, product availability, federal and state regulations and legislation, the regulatory process for new product candidates and indications, manufacturing issues that may arise, patent positions and litigation, among other factors. The forward-looking statements contained in this press release speak only as of the date the statements were made, and the Company does not undertake any obligation to update forward-looking statements, except as required by law.

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Source: Xenetic Biosciences, Inc.

www.xeneticbio.com

NASDAQ: XBIO

Filed by Xenetic Biosciences, Inc.
pursuant to Rule 425 under the Securities Act
of 1933, as amended, and deemed filed
pursuant to Rule 14a-12 under the Securities
Exchange Act of 1934, as amended
Filer: Xenetic Biosciences, Inc.
Subject Company: Xenetic Biosciences, Inc.
Commission File No.: 001-37937
Date: March 4, 2019



Corporate Presentation
March 2019

Enhancing lives with
transformative therapies

Forward-Looking Statements

This presentation contains various “forward-looking statements.” Forward-looking statements relate to expectations, beliefs, projections, future plans and strategies, anticipated events or trends and similar expressions concerning matters that are not historical facts. In some cases, you can identify forward-looking statements by the use of forward-looking terminology such as “believes,” “expects,” “may,” “will,” “would,” “could,” “should,” “seeks,” “approximately,” “intends,” “plans,” “projects,” “estimates” or “anticipates” or the negative of these words and phrases or similar words or phrases. All forward-looking statements may be impacted by a number of risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our plans to continue the development of our proposed drug candidate; our expectations regarding the nature, timing and extent of clinical trials and proposed clinical trials, including the timing of generating clinical data from these trials; our expectations regarding the timing for proposed submissions of regulatory filings, including but not limited to any Investigational New Drug filing or any New Drug Application; the nature, timing and extent of collaboration arrangements; the expected results pursuant to collaboration arrangements including the receipts of future payments that may arise pursuant to collaboration arrangements; the outcome of our plans to obtain regulatory approval of our drug candidates; the outcome of our plans for the commercialization of our drug candidates; our plans to address certain markets, engage third party manufacturers and evaluate additional drug candidates for subsequent commercial development and the likelihood and extent of competition to our drug candidates; and statements regarding our acquisition of the XCART platform (the “Acquisition”) and development of CAR T technology.

The forward-looking statements in this presentation are based on our beliefs, assumptions and expectations of our future performance, taking into account all information currently available to us. These beliefs, assumptions and expectations are subject to risks and uncertainties and can change as a result of many possible events or factors, not all of which are known to us. If a change occurs, our business, financial condition, liquidity and results of operations may vary materially from those expressed in our forward-looking statements. Important factors that could cause actual results to differ materially from such plans, estimates or expectations include, among others, (1) that one or more closing conditions to the Acquisition, including certain regulatory approvals, may not be satisfied or waived, on a timely basis or otherwise, that the required approval by the stockholders of the Company may not be obtained; (2) the risk that the Acquisition may not be completed on the terms or in the time frame expected by the Company, or at all; (3) unexpected costs, charges or expenses resulting from the Acquisition; (4) uncertainty of the expected financial performance of the Company following completion of the Acquisition; (5) failure to realize the anticipated benefits of the Acquisition; (6) the ability of the Company to implement its business strategy; (7) the occurrence of any event that could give rise to termination of the Acquisition; and (8) other risk factors as detailed from time to time in the Company’s reports filed with the SEC, including its annual report on Form 10-K, periodic quarterly reports on Form 10-Q, periodic current reports on Form 8-K and other documents filed with the SEC. The foregoing list of important factors is not exclusive. We cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on forward-looking statements, which apply only as of the date the statements were made. We do not intend and disclaim any duty or obligation to update or revise any industry information or forward-looking statements set forth in this report to reflect new information, future events or otherwise, except as required under the United States (“U.S.”) federal securities laws.



ADDITIONAL INFORMATION AND WHERE TO FIND IT

In connection with the Acquisition, the Company will file with the Securities and Exchange Commission (the "SEC"), a registration statement on Form S-4 that will include a combined 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 Acquisition. **INVESTORS AND SECURITY HOLDERS ARE URGED TO READ CAREFULLY AND IN THEIR ENTIRETY THESE DOCUMENTS WHEN THEY BECOME AVAILABLE, ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, AND OTHER DOCUMENTS FILED BY THE COMPANY WITH THE SEC IN CONNECTION WITH THE ACQUISITION, BECAUSE THESE DOCUMENTS WILL 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 will also be able to obtain free copies of the documents filed by the Company with the SEC from the respective companies by directing a written request to Xenetic Biosciences, Inc., 40 Speen Street, Suite #102, Framingham, MA 01701 or by calling 781-778-7720.

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Transformative acquisition positions Xenetic to address high value oncology market with innovative XCART platform

XCART Platform¹

Expanding the potential of CAR T cell therapy





- Proof-of-mechanism and preclinical evidence of target specificity
- Expect to meet with regulatory authorities to discuss development plan
- Over \$5 billion initial market opportunity in B-cell non-Hodgkin lymphoma²

XBIO-101

Phase 2 oncology asset

- Clinical body of data sufficient for Phase 2 studies in multiple indications
- Well suited for immuno-oncology combination therapies

Pipeline and Platform Technologies

Program	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Next Catalyst
XCART Platform	B-Cell Non-Hodgkin Lymphoma					Meet with regulatory authorities to discuss development plan
XBIO-101	Progesterone Resistant Endometrial Cancer					Data analysis
	Triple-Negative Breast Cancer					Exploratory study of estrogen receptor and I-O biomarkers
	Immuno-Oncology					Exploratory Phase 1 study
PolyXen™	Next Generation Delivery Platform for Biologics					Potential for non-dilutive milestone and royalty payments from partners

Experienced Management Team

Jeffrey F. Eisenberg

Chief Executive Officer & Director

Life Sciences executive with over 20 years of successful track record in value creation in both private and public companies; former CEO of Noven Pharmaceuticals and responsible for 2 product launches and led Noven's Novogyne Women's Health joint venture with Novartis

Curtis Lockshin, Ph.D.

Chief Scientific Officer

20 years Biotech/Pharma management experience, including discovery, preclinical and clinical development and commercial manufacturing; former CEO of SciVac Therapeutics, CTO of VBI Vaccines and VP of Corporate R&D Initiatives for OPKO Health

James F. Parslow, MBA, CPA

Chief Financial Officer

Over 30 years of experience providing financial and business leadership to biotech, manufacturing, technology, business-to-business e-commerce and cleantech industries

Board of Directors

Adam Logal
Chairman

CFO, OPKO Health; Former Director, VBI Vaccines; Nabi Biopharmaceuticals

Dmitry Genkin
Director

Former Head of Pharmavit, Russia's largest pharmaceutical company; Chairman, PJSC Pharmsynthez

James Eric Callaway, Ph.D.
Director

Head of Development, Elan Pharmaceuticals; Developed the antibodies Tysabri and bapineuzumab

Roman Knyazev
Director

Senior Investment Manager, Rusnano; Chairman, Pharmsynthez, PETAR and Nanolek; Director, SynBio

Firdaus Jal Dastoor, FCS
Director

Fellow Member of The Institute of Company Secretaries of India; Group Director of the Poonawalla Group of Companies

Roger Kornberg, Ph.D.
Director

Winzer Professor of Medicine in the Department of Structural Biology at Stanford University; Nobel Prize in Chemistry - molecular basis of Eukaryotic Transcription

Jeffrey F. Eisenberg
Chief Executive Officer & Director

Scientific Advisory Board

Dr. Matthew Frigault

Medical Oncologist in the Hematologic Malignancy Program at the Massachusetts General Hospital Cancer Center, as well as Assistant Director of the Cellular Immunotherapy Program, serves as Instructor at Harvard Medical School

Dr. Alexander Gabibov

Head of the Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry at the Russian Academy of Science. Dr. Gabibov holds several senior positions in the Biochemistry sphere in both Russia and France. In 2008, he was appointed President of the Russian Biochemical and Molecular Biology Society. In 2009, Dr. Gabibov took up the role of Foreign Correspondent at the National Academy of Pharmacy in France.

Prof. Dr. Franco Cavalli

Former Scientific Director, Institute of Oncology of Southern Switzerland (IOSI), Head of Organizing Committee of International Conference on Malignant Lymphoma (ICML), Chairman of Scientific Committee of the European School of Oncology (ESO) and of the World Oncology Forum (WOF), Founder of the International Extranodal Lymphoma Study Group (IELSG).

Dr. Davide Rossi

Deputy Head of the Division of Hematology and co-chair of the Clinical Lymphoid Tumors Investigation Program (CLIP) at the Institute of Oncology of Southern Switzerland (IOSI), Head of the Experimental Hematology research program at the Institute of Oncology Research (IOR), Member of Organizing Committee of the International Conference on Malignant Lymphoma. Dr. Rossi's translational research focuses on lymphomas and chronic lymphocytic leukemia.

XCART Platform¹

Expanding the Potential
of CAR T Cell Therapy

1: The Acquisition of the XCART platform is subject to closing. When filed, please see our Registration Statement on Form S-4 for more details.

CAR T Cell Therapy is Driving New Breakthroughs in the Treatment of Cancer

2 Approved CAR T Therapies

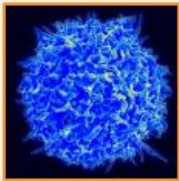


Advancing Development

~40 companies developing CAR T therapy¹

>240 CAR T trials registered on clinicaltrials.gov²

High Value Acquisitions



CBS New CAR T Treatment Giving Hope To Some Cancer Patients

Forbes CAR T Cell Therapy Is Here to Stay

Newsweek With latest gene therapy approval, a new medical era has officially arrived

XCART Transforms CAR T Therapy

XCART

XCART constructs can target *patient-specific* tumor neoantigens

Established proof-of-mechanism in B-cell lymphomas

Potential to address multiple tumor types

XCART is a proximity-based screening platform

Derived from Scripps technology

Proprietary cell-based screening technology



Compatible with current up- and down-stream CAR T manufacturing processes

Applicable to a wide range of CAR T constructs

Enables rapid construction of functional CARs & TCRs



SCIENCE ADVANCES | RESEARCH ARTICLE

CANCER

Autocrine-based selection of ligands for personalized CAR-T therapy of lymphoma

Alexey V. Stepanov¹, Oleg V. Markov², Ivan V. Chernikov², Daniil V. Gladkikh², Hongkai Zhang^{3,4}, Teresa Jones⁵, Alexandra V. Sen'kova², Elena L. Chernolovskaya², Marina A. Zenkova², Roman S. Kalinin¹, Maria P. Rubtsova⁵, Alexander N. Meleshko⁵, Dmitry D. Genkin⁷, Alexey A. Belogurov Jr.¹, Jia Xie^{3*}, Alexander G. Gabibov^{1*}, Richard A. Lerner^{3*}

We report the development of a novel platform to enhance the efficacy and safety of follicular lymphoma (FL) treatment. Since lymphoma is a clonal malignancy of a diversity system, every tumor has a different antibody on its cell surface. Combinatorial autocrine-based selection is used to rapidly identify specific ligands for these B cell receptors on the surface of FL tumor cells. The selected ligands are used in a chimeric antigen receptor T cell (CAR-T) format for redirection of human cytotoxic T lymphocytes. Essentially, the format is the inverse of the usual CAR-T protocol. Instead of being a guide molecule, the antibody itself is the target. Thus, these studies raise the possibility of personalized treatment of lymphomas using a private antibody binding ligand that can be obtained in a few weeks.

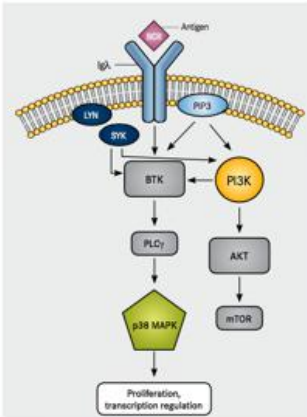
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XCART Shown to be Effective in B-Cell Lymphoma

XCART: Rationale for BCR Targeting

Engineered to target a patient- and tumor-specific neoantigen

B-cell receptor (BCR) on an individual patient's lymphoma cells



BCR signaling pathway

- Central regulator of B-cell function
- Promising anticancer drug target in lymphomas

BCR expressed by clonal B-cell tumor

- Pivotal driver of tumor pathways
- Patient- and tumor-specific antigen

Targeting a patient-specific BCR with CAR T therapy

- Imparts high selectivity
- Can overcome limitations of CD19 CAR T therapies

Market Opportunity – Non-Hodgkin Lymphoma Therapeutics

Estimated 2018 US Incidence of NHL: 75,000¹

Aggressive Lymphomas

Diffuse Large B-Cell Lymphoma (DLBCL):

US Incidence Most common subtype of NHL in the US (~40% of all NHL cases)
~30K/year

- ~ 50%** Of *Refractory & Relapsed* DLBCL have poor prognoses:²
- ORR: 26% (7% CR)
 - Median OS: 6.3 months

Indolent Lymphomas

Follicular Lymphoma (FL):

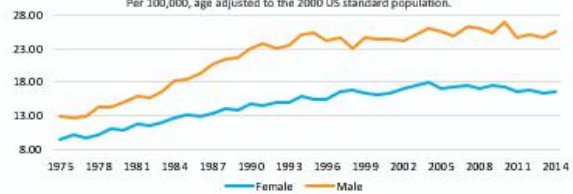
US Incidence Second most common subtype of NHL in the US (~20% of all NHL Cases)
~15K/year

- Majority of Follicular Lymphoma (FL) cases remain *incurable* with standard therapies
- Most patients undergo relapses over time, often with increasing frequency and aggressiveness

Global Market for Non-Hodgkin Lymphoma³

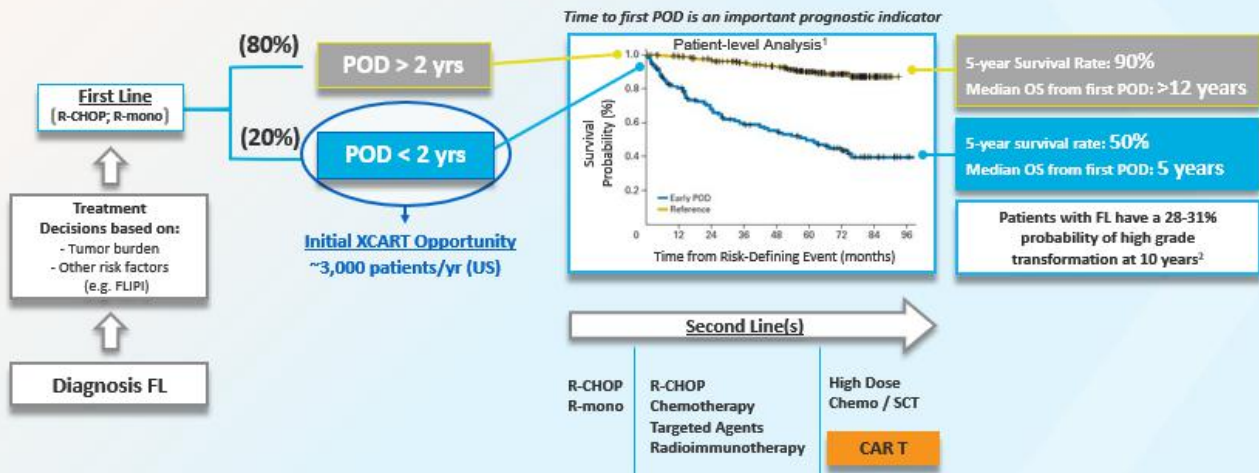


Trends in NHL Incidence Rates, 1975-2014³



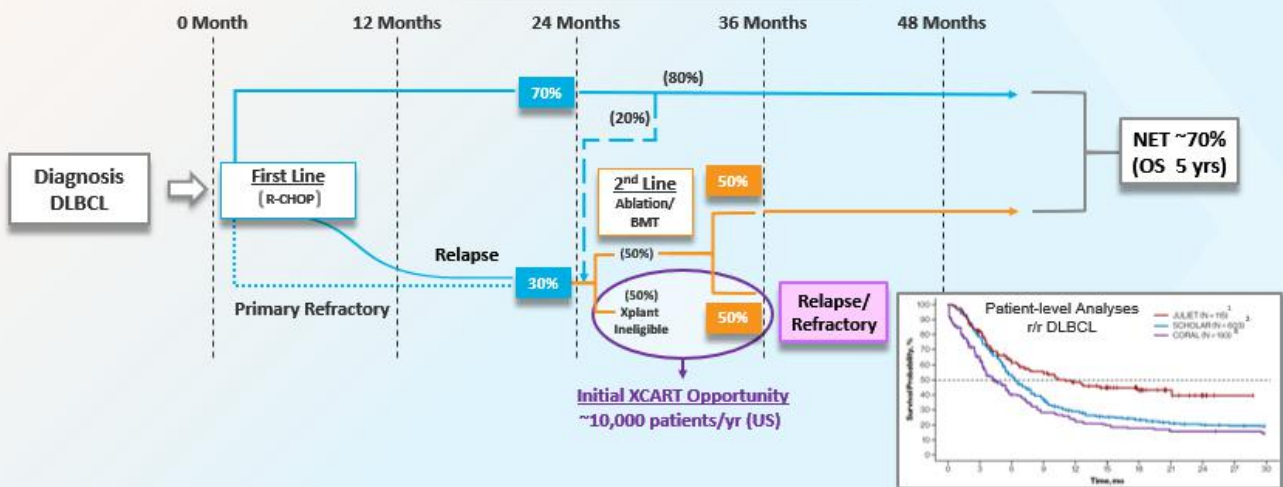
Unmet Need in Follicular Lymphoma (FL)

FL Treatment Timeline



Unmet Need in Diffuse Large B-Cell Lymphoma (DLBCL)

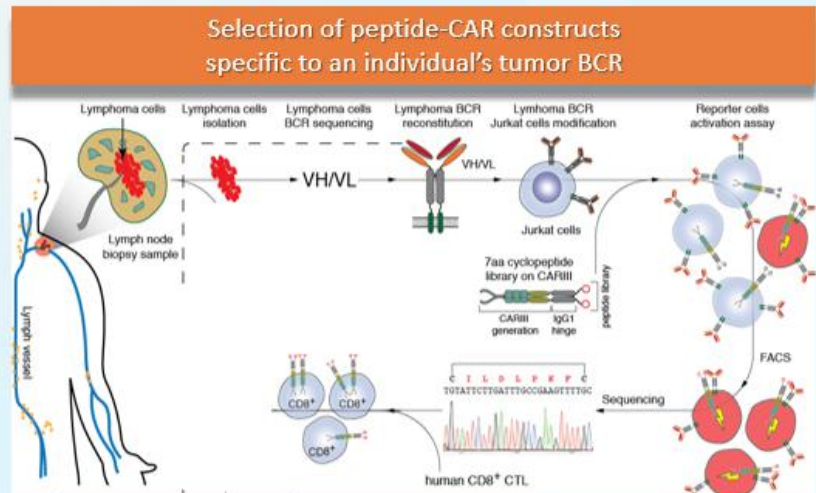
DLBCL Treatment Timeline



Selection of Peptide-CAR Constructs Specific to an Individual's Tumor BCR

XCART Proof of Mechanism: Workflow

- Lymph node biopsy sample is isolated from a patient with follicular lymphoma
- Collected tumor cells used for identification of malignant BCR genes - then reconstituted as membrane-bound tumor BCRs using PDGFR as membrane anchor
- The reconstituted tumor BCR, co-expressed with the cyclopeptide-CAR library on surface of Jurkat cell line, are used as reporter-cell system for selection of tumor BCR-targeting ligand
- Following several rounds of panning, selected peptide ligands (fused to chimeric antigen receptor), are sequenced and may be directly used for generation of therapeutic T lymphocytes modified by BCR-specific CAR

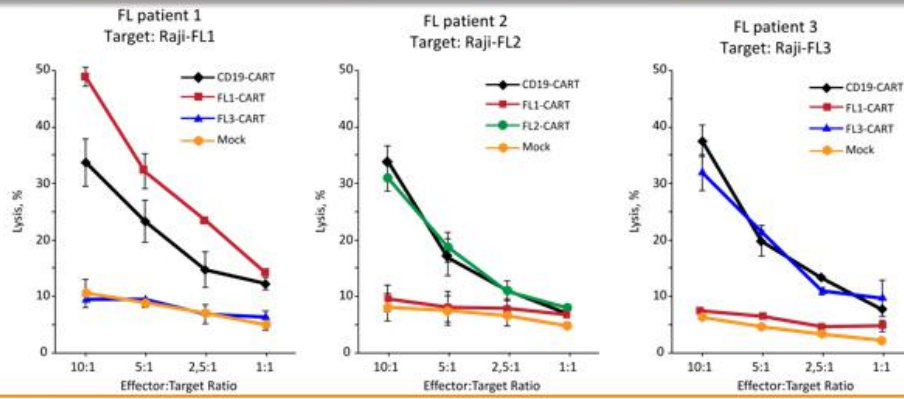


Cyclopeptide-CAR T Cells Selectively Kill Raji Cell Lines Expressing Target BCRs

XCART Proof-of-Mechanism: Patient Specificity

- Human CD8+ T cells were transduced with Lentiviral vectors coding for one of pepFL1-CAR, pepFL2-CAR, pepFL3-CAR or CD19-CAR constructs

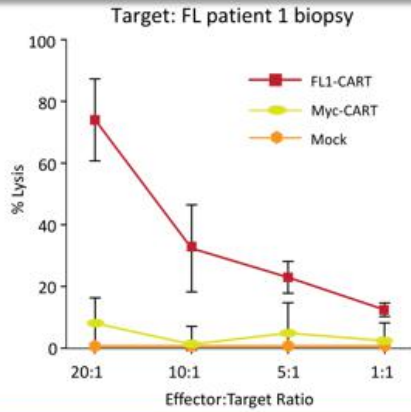
Raji cells (Raji-FL1, Raji-FL2 and Raji-FL3) expressing BCRs from the respective FL lymphomas were lysed by activated human CD8+ T-cells bearing a corresponding cyclopeptide-CAR construct



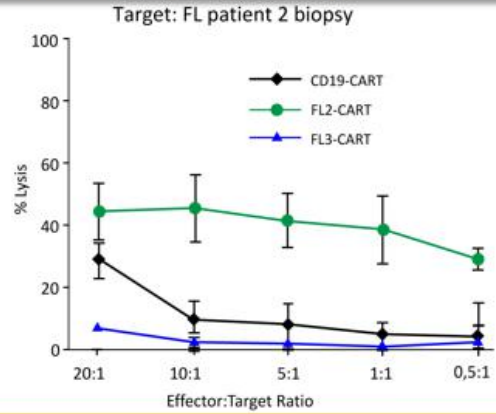
Induction of CTL in *Ex Vivo* Biopsy Material

XCART Proof-of-Mechanism: Patient Specificity

pepFL1-CAR T cells specifically lysed cells from pt-FL1
Myc-CAR T and Mock CAR T control cells: No lytic activity



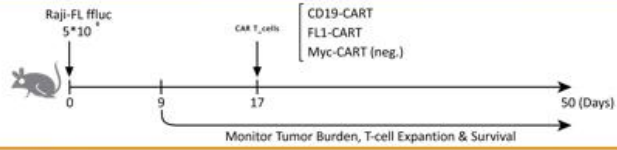
pepFL2-CAR T cells specifically lysed cells from pt-FL2
pepFL3-CAR T showed no lytic activity vs. pt-FL2
pepFL2-CAR T displays more lytic potency than CD-19 CAR T



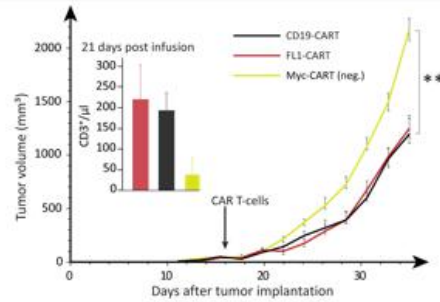
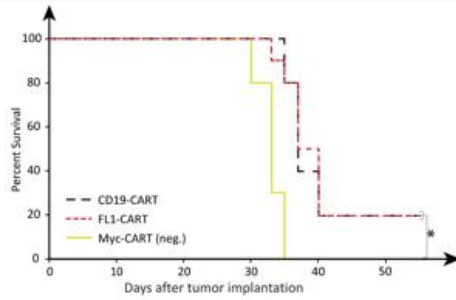
pepFL1-CAR T in *In Vivo* Tumor Model of Raji-FL1 Cell Line

XCART Proof-of-Mechanism: Efficacy and Selectivity

NOD SCID (CB17-Prkdc^{scid}/NcrCr1) mice were engrafted subcutaneously with 5×10^6 Raji-FL1 cells (Raji cells expressing the malignant BCR of Patient pt-FL1)



pepFL1-CAR T and CD19 Showed Similar Effect



XCART is Differentiated from CD19 CAR T Therapies for NHL

Tissue Specificity

Recognizes only patient- and tumor-specific neoantigen

Decreased antigen burden implies lower risk of CRS and Neurotoxicity

Off-Tumor Toxicity

No expectation of B-cell aplasia



Tumor Antigen Escape

Targets an antigen important to B cell signaling and proliferation

Permits T cells to be reengineered in response to CD19 antigen escape

XBIO-101

Phase 2 Oncology Asset

Clinical & Regulatory History

- Supporting nonclinical and 21 foreign controlled clinical studies involving 750 patients
- Pharmacovigilance under ex-US Marketing Authorizations
- Open US IND
- Two Phase 2 human clinical studies in endometrial cancer (US & Eastern Europe)
- Support for dosing up to 500mg IM 2X/week
- Ended enrollment in US Phase 2 study - data analysis ongoing

XBIO-101 in Context of Immuno-Oncology

Preclinical and human clinical evidence for XBIO-101 as an immunomodulator



- IFN induction
- Modulation of other immune pathways (including TLR9)

Near-Term Opportunities

Dose-ranging & exploratory biomarker studies in I-O settings



- Single agent and combination approaches
- Hormone receptor upregulation

PolyXen™ PSA Technology Platform

Enables Next Generation
Biologic Drugs

PolyXen: Next Generation Delivery Platform for Biologics

Polysialylation employs the biological polymer polysialic acid (PSA) to modulate the pharmacokinetic and pharmacodynamic profiles of protein drugs

Key Features

- Retention of native protein conformation
- Non-immunogenic
- Biodegradable
- Fewer injections
- Improved protease stability
- Improved thermal stability
- Broad patent cover

Broad Utility

- Designed to improve the clinical utility of most protein and peptide drugs
- Applicable to franchise extensions as well as candidates in development
- Potential utility for delivering small molecule drugs



License Agreement

- Exclusive License Agreement with Shire in the field of coagulation disorders
- Granted right to Shire to grant a nonexclusive sublicense to certain patents related to PolyXen
- Received \$7.5 million upfront payment
- Single digit royalties based on net sales
- Royalty stream could commence by end of 2019

Seeking to build a pipeline of partnerships utilizing PolyXen





Summary

CAR T Value Indicators Suggest Potential Significant Upside

Acquisitions

 Kite	acquired by	 GILEAD	for	\$11.9B
 Juno	acquired by	 Celgene	for	\$9B
 celldesignlabs	acquired by	 GILEAD	for	\$567M

Company Lead Program Phase MKT Cap¹

 ATARA BIO	EBV+ PTLD following HCT	Phase 3	\$1.6B
 cellectis	UCART19	Phase 1	\$669M
 Ziopharm ONCOLOGY	rGBM & Libtayo®	Phase 2	\$285M
 MITSUBISHI	MB-101 IL13Rα2-specific CAR	Phase 1	\$80M

Licensing Agreements

 Bellicum PHARMACEUTICALS	agreement with	 Agensys
 Pfizer	agreement with	 cellectis
\$80M upfront & up to \$185M per product		

abbvie	4 year agreement with	 Calibr
 Johnson & Johnson	agreement with	 Nanjing Legend for \$350M

A Compelling Investment Opportunity

Innovative XCART platform¹ addressing high-value oncology market

XCART Platform

Lead program targeting \$5 billion initial opportunity in B-cell non-Hodgkin lymphoma



- Proof-of-mechanism and preclinical evidence of target specificity

XBIO-101

Phase 2 oncology asset



- Clinical body of data sufficient for Phase 2 studies in multiple indications
- Potential applications in immuno-oncology

PolyXen

Shire Agreement



- Shire granted a nonexclusive sublicense to certain patents
- Royalty stream could commence by end of 2019
- Potential for additional partnerships

www.xeneticbio.com

NASDAQ: XBIO



Supplemental
Information

Enhancing lives with
transformative therapies

Identification of Individualized BCR-Targeting CAR T Constructs

XCART Proof-of-Mechanism

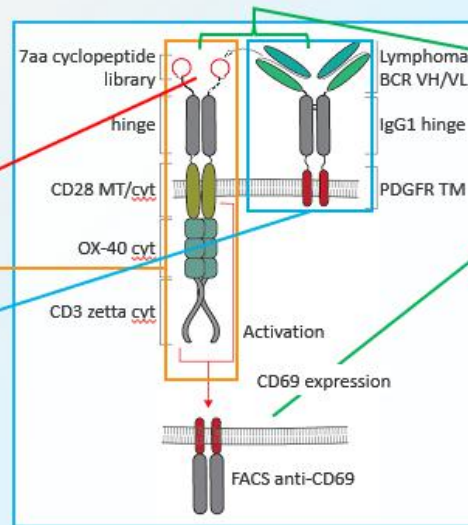
Selection of cyclopeptide-CARs specific to a targeted BCR:

Library of immortal Jurkat human T lymphocytes were modified to simultaneously express:

Unique cyclopeptide in antigen-binding region of the CAR construct

CAR construct containing a cyclopeptide

Patient-derived lymphoma BCR fused to PDGFR membrane anchor



If the BCR interacts with a peptide from the cyclopeptide library, the signaling domains of the CAR trigger a T cell activation cascade

Activated T cells express CD69 and may be readily detected and isolated via FACS

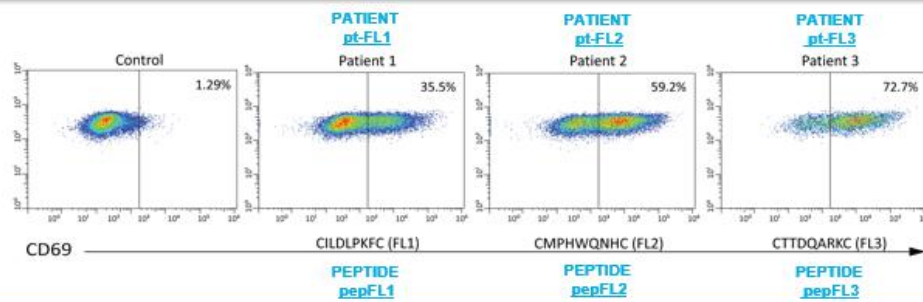
Selected BCR-specific "cyclopeptide-CAR" construct may be further used for transfection of patient T cells to target lymphomas

Selection and Isolation of Individualized Cyclopeptide-CAR Fusion Constructs

XCART Proof-of-Mechanism: Workflow

- Patient-specific BCRs were cloned from malignant sections of lymph node biopsies in 3 Follicular Lymphoma (FL) patients
- Several rounds of selection resulted in discovery of three patient-specific, cyclopeptide-containing CAR constructs

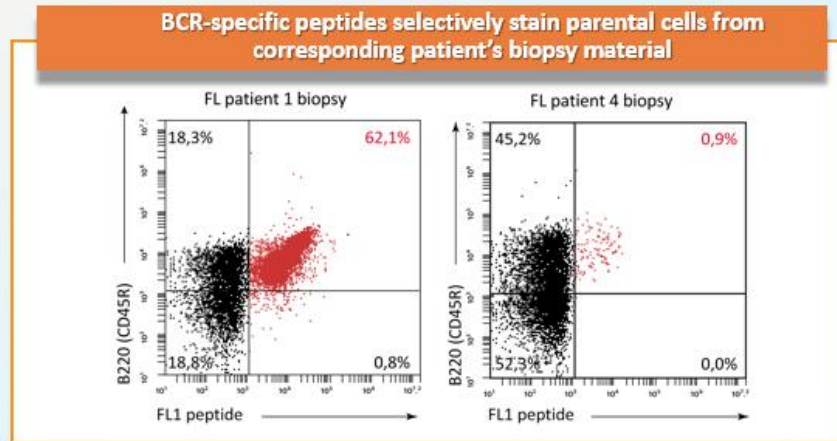
Cyclopeptide-containing CAR constructs (pepFL1-CAR, pepFL2-CAR, pepFL3-CAR) are selective for respective patient-derived (pt-FL1, pt-FL2, pt-FL3) BCR scFvs



Staining by pepFL1 Peptide Against pt-FL1 and pt-FL4 Cell Lines

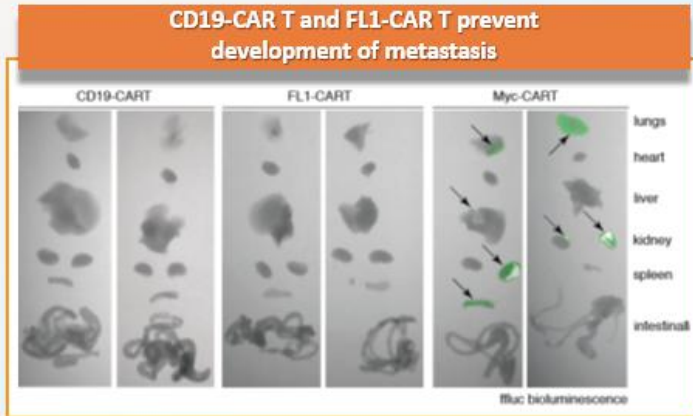
X-CART Proof-of-Mechanism: Patient and Target Specificity

- More than 60% of cells in the biopsy sample are B-cells targeted by the FL1 peptide
- Cells from follicular lymphoma patient pt-FL4 were not significantly stained by the pepFL1 peptide



pepFL1-CAR T in *In Vivo* Metastasis Model

- Bioluminescent imaging of organ-specific metastasis Raji-FL1 cells detected by D-luciferin (i.p. injection)



Raji-FL1 cells (green) on Day 35 after tumor implantation in mice treated by CD19-CAR T, FL1-CAR T and Myc-CAR T

pepFL1-CAR T Cells in Mouse Tumor Models of pt-FL1 Cells

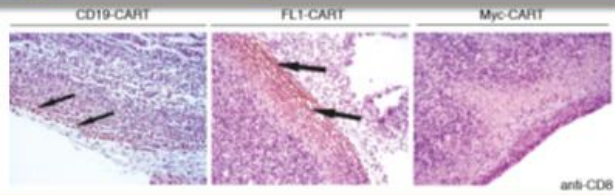
X-CART Proof-of-Mechanism: *In Vivo* PK

Immunohistochemical analysis:

CD19-CAR T and FL1-CAR T cells, but not Myc-CAR T cells, effectively invade the tumor

CAR T staining by human CD8-specific antibodies

Black arrows indicate CD19-CAR T, pepFL1-CAR T or Myc-CAR T infiltration into the tumor



Flow Cytometry:

CAR-modified T cells persist in peripheral blood 21 days post infusion

pepFL1-CAR T and CD19-CAR T cells are present in significantly elevated amounts relative to Myc-CAR T cells

