

## TRADEMARK ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

|   |                                  |                   |                       |
|---|----------------------------------|-------------------|-----------------------|
| SUBMISSION TYPE:  | NEW ASSIGNMENT                   |                   |                       |
| NATURE OF CONVEYANCE:   | SECURITY INTEREST                |                   |                       |
| CONVEYING PARTY DATA  |                                  |                   |                       |
| Name  | Formerly                         | Execution Date    | Entity Type           |
| Biovest International, Inc.   |                                  | 12/18/2013        | CORPORATION: DELAWARE |
| RECEIVING PARTY DATA  |                                  |                   |                       |
| Name:   | LV Administrative Services, Inc. |                   |                       |
| Street Address:   | 230 Park Avenue, Suite 1152      |                   |                       |
| City:   | New York                         |                   |                       |
| State/Country:  | NEW YORK                         |                   |                       |
| Postal Code:  | 10169                            |                   |                       |
| Entity Type:  | CORPORATION: DELAWARE            |                   |                       |
| PROPERTY NUMBERS Total: 8   |                                  |                   |                       |
| Property Type   | Number                           | Word Mark         |                       |
| Registration Number:  | 3794981                          | BIOVEST           |                       |
| Registration Number:  | 3716935                          | BIOVEST           |                       |
| Registration Number:  | 3716936                          | BIOVEST           |                       |
| Registration Number:  | 2379677                          | ACUSYST-MAXIMIZER |                       |
| Registration Number:  | 2379695                          | ACUSYST-XCELL     |                       |
| Registration Number:  | 4066185                          | AUTOVAXID         |                       |
| Serial Number:  | 85598406                         | AUTOVAX           |                       |
| Serial Number:  | 85672896                         | BIOVAXID          |                       |
| CORRESPONDENCE DATA   |                                  |                   |                       |
| Fax Number:   | 3026365454                       |                   |                       |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> |                                  |                   |                       |
| Phone:  | 800-927-9801 x 62348             |                   |                       |
| Email:  | jpaterso@cscinfo.com             |                   |                       |
| Correspondent Name:   | Corporation Service Company      |                   |                       |

CH \$215.00 3794981

Address Line 1: 1090 Vermont Avenue NW, Suite 430  
Address Line 4: Washington, DISTRICT OF COLUMBIA 20005

|                         |               |
|-------------------------|---------------|
| ATTORNEY DOCKET NUMBER: | 013478        |
| NAME OF SUBMITTER:      | Jean Paterson |
| Signature:              | /jep/         |
| Date:                   | 02/14/2014    |

Total Attachments: 16  
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as from time to time amended, restated, supplemented or otherwise modified, the "Agreement"), dated as of December 18, 2013, is made by Biovest International, Inc., a Delaware corporation (the "Company" or the "Grantor"), in favor of LV Administrative Services, Inc., a Delaware corporation, as administrative and collateral agent for the Lenders (as defined in the Credit Agreement referred to below) (the "Agent").

WHEREAS, pursuant to that certain Credit and Security Agreement dated as of the date hereof (as amended, restated, supplemented and/or otherwise modified from time to time, the "Credit Agreement") by and among the Company, the Lenders party thereto from time to time and the Agent, the Lenders have agreed to provide financial accommodations to the Company;

WHEREAS, Creditor Parties are willing to enter into the Credit Agreement only upon the condition, among others, that Grantor shall have executed and delivered to Agent this Agreement;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby agrees as follows:

### Section 1. DEFINED TERMS; RULES OF CONSTRUCTION.

- (a) Capitalized terms used in this Agreement but not otherwise defined herein have the meanings given to them in the Credit Agreement.
- (b) When used herein the following terms shall have the following meanings:

"Copyrights" means all copyrights arising or protected under the laws of the United States, any other country or any political subdivision thereof, whether registered, or unregistered and whether published or unpublished, all registrations and recordings therefor, and all applications in connection therewith, including but not limited to all registrations, recordings and applications in the United States Copyright Office, any State, or any similar office or agency of the United States, any State, any other country or political subdivision, or any other registry.

"Copyright Licenses" means all agreements pursuant to which any Grantor is licensor or licensee, granting any right under any Copyright, including but not limited to, rights to manufacture, reproduce, display, distribute, perform, modify or otherwise exploit, and sell materials embodying or derived from, any Copyrighted work.

"Intellectual Property" means any and all of the following, throughout the world: Patents, Trademarks, Copyrights, mask works, designs, trade secrets, information, databases, rights of publicity, software, and any other proprietary rights and processes; any licenses to use any of the foregoing owned by a third party including Patent Licenses, Trademark Licenses and Copyright Licenses; and registrations, applications and recordings pertaining to any of the foregoing on any registry;

**"Obligations"** shall have the meaning provided thereto in the Credit Agreement.

**"PTO"** means the United States Patent and Trademark Office and any successor office or agency.

**"Patents"** means all patents issued by the PTO, any similar office or agency of the United States, any State, or any other country or political subdivision or other registry, all recordings thereof, and all applications therefor.

**"Patent Licenses"** means all agreements pursuant to which any Grantor is licensor or licensee, granting any right to manufacture, have made, import, use, or sell any invention covered in whole or in part by a Patent.

**"Trademarks"** means all trademarks, trade names, corporate names, business names, fictitious business names, Internet Domain Names, trade styles, services marks, logos and other source or business identifiers, arising or protected under the laws of the United States, any State any other country or political subdivision thereof, whether registered or unregistered, and all goodwill connected with the use of and symbolized thereby, all registrations and recordings thereof, and all applications therefor, in the PTO, in any similar office or agency of the United States, any State, any other country or political subdivision, any Internet Domain Name registrar, or any other registry.

**"Trademark Licenses"** mean all agreements pursuant to which any Grantor is licensor or licensee, granting any right to use a Trademark.

**"UCC"** shall have the meaning provided thereto in the Credit Agreement.

- (c) All Schedules, Addenda, Annexes and Exhibits hereto or expressly identified to this Agreement are incorporated herein by reference and taken together with this Agreement constitute but a single agreement. The words "herein", "hereof" and "hereunder" or other words of similar import refer to this Agreement as a whole, including the Exhibits, Addenda, Annexes and Schedules thereto, as the same may be from time to time amended, modified, restated or supplemented, and not to any particular section, subsection or clause contained in this Agreement. Wherever from the context it appears appropriate, each term stated in either the singular or plural shall include the singular and the plural, and pronouns stated in the masculine, feminine or neuter gender shall include the masculine, the feminine and the neuter. The term "or" is not exclusive. The term "including" (or any form thereof) shall not be limiting or exclusive. All references to statutes and related regulations shall include any amendments of same and any successor statutes and regulations. All references in this Agreement or in the Schedules, Addenda, Annexes and Exhibits to this Agreement to sections, schedules, disclosure schedules, exhibits, and attachments shall refer to the corresponding sections, schedules, disclosure schedules, exhibits, and attachments of or to this Agreement. All references to any instruments or agreements, including references to any of this Agreement or the Ancillary Agreements shall include any and all

modifications or amendments thereto and any and all extensions or renewals thereof.

- (d) The parties acknowledge that each party and its counsel have reviewed this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments, schedules or exhibits thereto.
- (e) In the event of an irreconcilable conflict between the terms of this Agreement and the terms of the Credit Agreement, the Agent shall have the right to determine which Agreement shall govern with respect to each such conflict.

Section 2. GRANT OF SECURITY INTEREST IN INTELLECTUAL PROPERTY COLLATERAL. To secure the prompt payment to the Creditor Parties of the Obligations of the Grantors now or hereafter existing from time to time, each Grantor hereby pledges and grants to the Agent, for the ratable benefit of the Creditor Parties, a continuing security interest in and Lien upon all of such Grantor's right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired (collectively, the "Collateral"):

- (a) Trademarks and Trademark Licenses to which it is a party including those referred to on Schedule I hereto;
- (b) Patents and Patent Licenses to which it is a party, including those referred to on Schedule II hereto;
- (c) Copyrights and Copyright Licenses to which it is a party, including those referred to on Schedule III hereto;
- (d) Intellectual Property not covered by the foregoing, including those referred to on Schedule IV hereto;
- (e) Renewals, reissues, continuations, divisions, or extensions of any of the foregoing;
- (f) Rights to sue third parties for past, present or future infringement, dilution, misappropriation, or other violation of rights in any Intellectual Property, including injury to the goodwill associated with any Trademark, and all causes of action for the same;
- (g) All products and Proceeds of all or any of the foregoing, tort claims and all claims and other rights to payment including (i) insurance claims against third parties for loss of, damage to, or destruction of, the foregoing Collateral and (ii) payments due or to become due under licenses of any or all of the foregoing and Proceeds payable under, or unearned premiums with respect to policies of insurance in whatever form; provided, however, that the Collateral shall not constitute a grant of a security interest in any trademark or service mark applications filed in the PTO on the basis of any Grantor's intent to use such trademark or service mark,

unless and until a statement of use or amendment to allege use is filed in the PTO, in which event, such trademark or service mark shall automatically be included in the Collateral.

Section 3. REPRESENTATIONS AND WARRANTIES.

Each Grantor represents and warrants to Agent, in addition to the representations and warranties in Credit Agreement and Loan Documents (as defined in the Credit Agreement), that:

- (a) Such Grantor does not own, in whole or in part, any Patent, Trademark, Copyright, or other Intellectual Property which is the subject of a registration or application in the United States Patent and Trademark Office, United States Copyright Office, any similar office or agency of the United States, any State, any other country or political subdivision, any Internet Domain Name registrar, or any other registry, except as set forth in Schedule I, Schedule II, Schedule III, and Schedule IV, respectively, hereto.
- (b) such Grantor is the sole owner of the Intellectual Property listed on Schedules I to IV hereto (as such schedules may be amended or supplemented from time to time) identified as owned by such Grantor, and all registrations and applications for such Intellectual Property are standing in the name of such Grantor.
- (c) no Intellectual Property has been licensed or sublicensed by any Grantor to any Affiliate or third party, except under the licenses disclosed in Schedules I to IV hereto.
- (d) all Intellectual Property owned by such Grantor, including the items set forth on Schedules I to IV, and, to such Grantor's knowledge, all Intellectual Property licensed to such Grantor, is subsisting in good standing, valid, and enforceable and such Grantor performed all acts and has paid all renewal, maintenance, and other fees and taxes required to maintain, each registration and application for Intellectual Property owned by such Grantor in full force and effect.
- (e) such Grantor has been using statutory notice of registration in connection with its use of registered Trademarks, proper marking practices in connection with the use of Patents, and appropriate notice of copyright in connection with the publication of Copyrighted material ;
- (f) such Grantor has taken all actions necessary to insure that all licensees of Trademarks owned by such Grantor use consistent standards of quality as directed by Grantor in connection with their licensed products and services;
- (g) this Agreement is effective to create a valid security interest in favor of Agent, for the benefit of the Creditor Parties, in all of Grantor's Intellectual Property. Upon the (i) filing of this Intellectual Property Security Agreement in the PTO (with respect to the United States Patents set forth on Schedule I hereto and the United States Trademarks set forth on Schedule II hereto), and in the United States Copyright Office (with respect to the United States Copyrights set forth on

Schedule III hereto), and (ii) the filing of all appropriate UCC-1 financing statements, such security interest will be enforceable as such as against any and all creditors of, and purchasers from, Grantor. Upon the making of such filings set forth above, all action necessary or desirable to protect and perfect Agent's Lien on each Grantor's United States and State Patents, Trademarks, and Copyrights, shall have been taken.

Section 4. COVENANTS. Each Grantor covenants and agrees with Agent, from and after the date of this Agreement, and in addition to the covenants in Credit Agreement, that:

- (a) Such Grantor shall notify Agent immediately if it knows or has reason to know that any application or registration relating to any Intellectual Property owned by such Grantor may become abandoned, dedicated to the public, placed in the public domain or otherwise invalidated or unenforceable, or of any adverse determination or development in any proceeding (including the institution of any proceeding) in the PTO, the United States Copyright Office, or any similar agency of the United States, any State, or other country or political subdivision thereof, any Internet Domain registry or other registry, or any court, regarding Grantor's ownership of or right to use register, keep and/or maintain any Intellectual Property;
- (b) Such Grantor shall take all actions necessary, or requested by Agent, to maintain and pursue each application, for registration in respect of the Intellectual Property owned by Grantor from time to time, by including filing applications for renewal, affidavits of use, affidavits of noncontestability and the commencement and prosecution of opposition and interference and cancellation proceedings;
- (c) In the event that any Intellectual Property owned by or exclusively licensed to such Grantor is infringed, diluted, misappropriated, or otherwise violated by a third party, such Grantor shall notify Agent promptly after such Grantor learns thereof and shall promptly take all reasonable actions to stop the same and enforce its rights in such Intellectual Property and to recover all damages therefor, including, but not limited to, the initiation of a suit for injunctive relief and damages and shall take such other actions as are reasonable, or as Agent shall deem appropriate under the circumstances to protect such Grantor's rights in such Intellectual Property..
- (d) Such Grantor shall use statutory notice of registration in connection with its use of registered Trademarks, proper marking practices in connection with the use of Patents, appropriate notice of copyright in connection with the publication of Copyrighted materials, and other legends or markings applicable to other Intellectual Property;
- (e) Such Grantor shall maintain the level of the quality of products sold and services rendered under any Trademarks owned by such Grantor at a level at least consistent with the quality of such products and services as of the date hereof, and

such Grantor shall adequately control the quality of goods and services offered by any licensees of its Trademarks; and

- (f) Such Grantor shall take all steps necessary to protect the secrecy of all trade secrets material to its business.

Section 5. SECURITY AGREEMENT. The security interests granted pursuant to this Agreement are granted in conjunction with the security interests granted by each Grantor to Agent, for the ratable benefit of the Creditor Parties, pursuant to the Credit Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of Agent with respect to the Collateral made and granted herein are more fully set forth in the Credit Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Any rights and remedies set forth herein are without prejudice to, and in addition to, those set forth in the Credit Agreement.

Section 6. REINSTATEMENT. This Agreement shall remain in full force and effect and continue to be effective should any petition be filed by or against any Grantor for liquidation or reorganization, should any Grantor become insolvent or make an assignment for the benefit of any creditor or creditors or should a receiver or trustee be appointed for all or any significant part of such Grantor's assets, and shall continue to be effective or be reinstated, as the case may be, if at any time payment and performance of the Obligations, or any part thereof, is, pursuant to applicable law, rescinded or reduced in amount, or must otherwise be restored or returned by any obligee of the Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment or performance had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, restored or returned, the Obligations shall be reinstated and deemed reduced only by such amount paid and not so rescinded, reduced, restored or returned.

Section 7. INDEMNIFICATION. Each Grantor assumes all responsibility and liability arising from the use of the Intellectual Property and Grantors, jointly and severally, hereby indemnify and hold Agent and each other Creditor Party harmless from and against any claim, suit, loss, damage or expense (including reasonable attorneys' fees) arising out of any Grantor's operations of its business from the use of the Intellectual Property. In any suit, proceeding or action brought by Agent under any Patent License, Trademark License, or Copyright License for any sum owing thereunder, or to enforce any provisions of such License, Grantors will, jointly and severally, indemnify and keep Agent and each other Creditor Party harmless from and against all expense, loss or damage suffered by reason of any defense, set off, counterclaim, recoupment or reduction or liability whatsoever of the obligee thereunder, arising out of a breach of any Grantor of any obligation thereunder or arising out of any other agreement, indebtedness or liability at any time owing to or in favor of such obligee or its successors from any Grantor, and all such obligations of Grantors shall be and remain enforceable against and only against Grantors and shall not be enforceable against Agent or any other Creditor Party.

Section 8. NOTICES. Whenever it is provided herein that any notice, demand, request, consent, approval, declaration or other communication shall or may be given to or served upon any of the parties by any other party, or whenever any of the parties desires to give



and serve upon any other party any communication with respect to this Agreement, each such notice, demand, request, consent, approval, declaration or other communication shall be in writing and shall be given in the manner, and deemed received, as provided for in Credit Agreement.

Section 9. TERMINATION OF THIS AGREEMENT. Subject to Section 6 hereof, this Agreement shall terminate upon payment in full in cash of all Obligations and irrevocable termination of Credit Agreement.

Section 10. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS MADE AND PERFORMED IN SUCH STATE, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW.

[Signature Page to Follow]

IN WITNESS WHEREOF, each Grantor has executed this Intellectual Property Security Agreement as of the date first written above.

BIOVEST INTERNATIONAL INC.

By: 

Name: David Moser

Title: Secretary

ACCEPTED and ACKNOWLEDGED by:

LV ADMINISTRATIVE SERVICES INC., as Agent

By: 

Name: Eugene Glin

Title: Principal

SIGNATURE PAGE TO  
INTELLECTUAL PROPERTY  
SECURITY AGREEMENT

TRADEMARK  
REEL: 005216 FRAME: 0474

SCHEDULE I  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

[If there are multiple Grantors, identify which items are owned by which Grantor]

I. TRADEMARK REGISTRATIONS

| SLF REFERENCE NO.  | MARK   | COUNTRY | REG. NO.  | REG. DATE |
|--|--|---------|-----------|-----------|
| BVZ.IIU4T<br>Class 5:                                      | BIOVEST<br>Biologic product compositions, namely, proteins, antibodies, vaccine compositions, cell based products and growth factors, for use in the cure, mitigation, treatment and prevention of disease   | US      | 3,794,981 | 05/25/10  |
| BVZ.IIU4T.CTM<br>Class 5:<br><br>Class 9:<br><br>Class 42: | BIOVEST<br>Pharmaceutical and veterinary preparations; biologic product compositions for use in the cure, mitigation, treatment and prevention of diseases<br><br>Scientific devices, bioreactors, cultureware, replacement parts, and control systems for the development, production and purification of proteins;<br><br>computer hardware; computer software<br><br>Scientific and technological services and research and design relating thereto; industrial analysis and research services; design and development of computer hardware and software;<br><br>medical services related to the development, production and purification of proteins | EU      | 004239422 | 01/13/05  |
| BVZ.IIU5T<br>Class 9:                                      | BIOVEST<br>Scientific devices for the development, production and proliferation of proteins, namely, bioreactors for automated cell culture and protein production, automated protein purification systems, culture ware consisting of disposable inserts for said bioreactors and purification systems; replacement parts for said bioreactors and purification systems; and control systems for use with said bioreactors and purification systems   | US      | 3,716,935 | 11/24/09  |
| BVZ.IIU6T<br>Class 42:                                     | BIOVEST<br>Medical research and laboratory services in the field of the development, production, and purification of proteins and Medical laboratory services in the field of the development, production, and purification of proteins for use in the cure, mitigation, treatment and prevention of disease   | US      | 3,716,936 | 11/24/09  |

|                          |  |     |           |          |
|--------------------------|--|-----|-----------|----------|
| BVZ.TM1T<br>Class 9:     | ACUSYST-MAXIMIZER<br>Instrumentation for the culturing of microorganisms, cells and tissue; namely, incubation chambers, pumps, culture chambers or bioreactors, tubing and bottles, gas/heat exchangers, computer controllers, key pads and computer programs sold as a unit; computer programs used in cell culturing  | US  | 2,379,677 | 08/22/00 |
| BVZ.TM2T<br>Class 9:     | ACUSYST-XCELL<br>Instrumentation for the culturing of microorganisms, cells and tissue; namely incubation chambers, pumps, culture chambers or bioreactors, tubing and bottles, gas/heat exchangers, computer controllers, key pads and computer programs sold as a unit; computer programs used in cell culturing   | US  | 2,379,695 | 08/22/00 |
| BVZ.TM3T.CTM<br>Class 5: | BIOVAXID<br>Medical and veterinary preparations and substances; biologic product compositions for use in the diagnosis, cure, mitigation, treatment and prevention of diseases   | EU  | 003605698 | 01/09/04 |
| BVZ.TM8<br>Class 9:      | AUTOVAXID<br>Scientific instruments and systems, namely, fully enclosed automated bioreactor-based instruments comprised of a control unit, bioreactors, cultureware, and related computer hardware and software system and component parts, all used for cell culture and the development, production, and purification of proteins   | US  | 4,066,185 | 12/06/11 |
| BVZ.TM8CTM<br>Class 9:   | AUTOVAXID<br>Scientific instruments and systems, namely, fully enclosed automated instruments consisting of a control unit, namely, computer hardware, software, pumps, and other related component parts therefore sold as a unit, and a disposable cultureware unit consisting of bioreactors, tubing and other related component parts therefore sold as a unit with said control unit and/or separately, all for use in connection with cell culture and the development, production, and purification of proteins | CTM | 10540839  | 01/04/12 |
| BVZ.ITU9MP<br>Class 9:   | AUTOVAX<br>Scientific instruments and systems, namely, fully enclosed automated instruments consisting of a control unit, namely, computer hardware, software, pumps, and other related component  | CTM | 1,139,567 | 10/01/12 |

parts therefore sold as a unit, and a disposable cultureware unit consisting of bioreactors, tubing and other related component parts therefore sold as a unit with said control unit and/or separately, all for use in connection with cell culture and the development, production, and purification of virus and viral vaccines

\* A Community Trade Mark (CTM) is any trademark which is pending registration or has been registered in the European Union as a whole (rather than on a national level within the EU).

## II. TRADEMARK APPLICATIONS

| SLE REFERENCE NO. | MARK  | COUNTRY | APPLICATION NUMBER | APPLICATION DATE |
|-------------------|---|---------|--------------------|------------------|
| BVZ.ITM8CA        | AUTOVAXID   | CA      | 85/241,512         | 02/14/11         |
| Class 9:          | Scientific instruments and systems, namely, fully enclosed automated instruments consisting of a control unit, namely, computer hardware, software, pumps, and other related component parts therefore sold as a unit, and a disposable cultureware unit consisting of bioreactors, tubing and other related component parts therefore sold as a unit with said control unit and/or separately, all for use in connection with cell culture and the development, production, and purification of proteins                 |         |                    |                  |
| BVZ.ITU9          | AUTOVAX   | US      | 85/598,406         | 04/16/12         |
| Class 9:          | Scientific instruments and systems, namely, fully enclosed automated instruments consisting of a control unit, namely, computer hardware, software, pumps, and other related component parts therefore sold as a unit, and a disposable cultureware unit consisting of bioreactors, tubing and other related component parts therefore sold as a unit with said control unit and/or separately, all for use in connection with cell culture and the development, production, and purification of virus and viral vaccines |         |                    |                  |
| BVZ.ITU10         | BIOVAXID  | US      | 85/672,896         | 07/10/12         |
| Class 5:          | Biologic product compositions for human use, namely, vaccines and antibody compositions, for use in the cure, mitigation, treatment and prevention of diseases  |         |                    |                  |
| BVZ.ITU10CA       | BIOVAXID  | CA      | Unknown            | 01/10/13         |
| Class 5:          | Biologic product compositions for human use, namely, vaccines and antibody compositions, for use in the cure, mitigation, treatment and prevention of diseases  |         |                    |                  |

### III. TRADEMARK LICENSES\*

| SLE REFERENCE<br>NO. | REG. NO. | MARK | COUNTRY | REG. DATE |
|----------------------|----------|------|---------|-----------|
|----------------------|----------|------|---------|-----------|

### IV. INTERNET DOMAIN NAMES

| SLE REFERENCE<br>NO. | NAME | REGISTRAR |
|----------------------|------|-----------|
|----------------------|------|-----------|

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• IP Licenses are typically scheduled as agreements (i.e. title, date, parties) and not by the licensed IP, due to burdensomeness on the Grantor and the fact that not all the IP subject to the license may be registered.

SCHEDULE II  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

[If there are multiple Grantors, identify which items are owned by which Grantor]

I. PATENTS

| SIE REFERENCE NO.                     | COUNTRY        | PATENT TITLE   | PATENT NO.      | DATE       |
|---------------------------------------|----------------|--|-----------------|------------|
| BVZ.018T                              | United States  | Micro Hollow Fiber Bioreactor  | 6001585         | 12/14/1999 |
| BVZ.052XC2                            | United States  | Extra-Capillary Fluid Cycling System and Method for a Cell Culture Device                | 8540499         | 09/24/2013 |
| BVZ.052XC1TAT                         | Austria        | <i>same as above</i>   | AT2027247       | 01/26/2011 |
| BVZ.052XC1TCH                         | Switzerland    | <i>same as above</i>   | P2027247        | 01/26/2011 |
| BVZ.052XC1TDE                         | Germany        | <i>same as above</i>   | DE602007012238D | 01/26/2011 |
| BVZ.052XC1TEPO,<br>AT, CH, DE, FR, GB | EPO            | <i>same as above</i>   | 07777189.7      | 01/26/2011 |
| BVZ.052XC1TFR                         | France         | <i>same as above</i>   | FR2027247       | 01/26/2011 |
| BVZ.052XC1TGB                         | United Kingdom | <i>same as above</i>   | GB2027247       | 01/26/2011 |
| BVZ.054XC2                            | United States  | Method and System for the Production of Cells and Cell Products and Applications Thereof | 8383397         | 02/26/2013 |

II. PATENT APPLICATIONS

| SIE REFERENCE NO. | COUNTRY       | APPLICATION TITLE   | SERIAL NO.        | DATE       |
|-------------------|---------------|---|-------------------|------------|
| BVZ.054XC1DIV1EP  | EP            | Method and System for the Production of Cells and Cell Products and Applications Thereof              | 11173373.9        | 05/21/2007 |
| BVZ.054XC1DIV1HK  | Hong Kong     | <i>same as above</i>  | 12106563          | 05/21/2007 |
| BVZ.054XC1TEPO    | EP            | <i>same as above</i>  | 07777182.2        | 05/21/2007 |
| BVZ.054XC2D1      | US            | <i>same as above</i>  | 13/664,048        | 10/30/2012 |
| BVZ.059XC1PCT     | WIPO          | Method and Apparatus for Virus and Vaccine Production   | PCT/US2012/041942 | 06/11/2012 |
| BVZ.059XC1        | US            | <i>same as above</i>  | 14/122,309        | 11/26/2013 |
| BVZ.060XC1PCT     | WIPO          | Tumor-Specific GM-CSF Cytokine Response as Predictor of Cancer Vaccine Effectiveness                  | PCT/US2012/068574 | 12/07/2012 |
| BVZ.061C2XC1      | United States | Materials and Methods for Designing Autologous Idiotype Vaccines and Treatment of B-Cell Malignancies | 13/816,918        | 09/23/2013 |
| BVZ.061C2XC1PCT   | WIPO          | <i>same as above</i>  | PCT/US2011/047645 | 08/12/2011 |

|                |      |   |                   |            |
|----------------|------|---|-------------------|------------|
| BVZ.062CXC1EPO | EPO  | Materials and Methods for Directing an Immune Response to an Epitope                            | 11839090.5        | 11/08/2011 |
| BVZ.062CXC1    | US   | <i>same as above</i>  | 13/884,177        | 05/08/2013 |
| BVZ.062CXC1PCT | WIPO | <i>same as above</i>  | PCT/US2011/059806 | 11/08/2011 |
| BVZ.067XC1PCT  | WIPO | Method and Apparatus for Antibody Production and Purification                                   | PCT/US2012/041949 | 06/11/2012 |
| BVZ.067XC1     | US   | <i>same as above</i>  | 14/122,327        | 11/26/2013 |
| BVZ.068XC1PCT  | WIPO | Methods for Cancer Vaccine Design   | PCT/US2013/057667 | 08/30/2013 |
| BVZ.069XC1PCT  | WIPO | Biomufacturing Suite and Methods for Large-Scale Production of Cells, Viruses, and Biomolecules | PCT/US2013/057156 | 08/28/2013 |
| BVZ.VAP.100P   | US   | Virus-Like Particles And Methods Related Thereto  | 61/899,783        | 11/04/2013 |

### III. PATENT LICENSES\*

License Agreement Between Biovest International, Inc. and ViraCell Advanced Products, LLC, dated July 29, 2013.

Exclusive License Agreement Between The Board of Trustees of the Leland Stanford Junior University and Biovest International, Inc., dated September 17, 2004.

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\* See comment in prior footnote.



SCHEDULE III  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

[If there are multiple Grantors, identify which items are owned by which Grantor]

I. COPYRIGHT REGISTRATIONS

| SLE REFERENCE<br>NO. | COUNTRY | COPYRIGHT | REG. NO. | DATE |
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|----------------------|---------|-----------|----------|------|

II. COPYRIGHT APPLICATIONS

| SLE REFERENCE<br>NO. | COUNTRY | COPYRIGHT | REG. NO. | DATE |
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III. COPYRIGHT LICENSES\*

| SLE REFERENCE<br>NO. | COPYRIGHT | REG. NO. | DATE |
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\* See comment in prior footnote. One exception to this is where the Grantor is an exclusive license of U.S. registered copyrights. In such case, the registrations should be identified so that the license itself can be recorded in the U.S. Copyright Office against such registrations followed by the recording of the lien against them, as well.

SCHEDULE IV  
TO  
INTELLECTUAL PROPERTY SECURITY AGREEMENT

OTHER INTELLECTUAL PROPERTY REGISTRATIONS AND APPLICATIONS.

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