

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

FORM 10-K/A  
(Amendment No. 2)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 31, 2016

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-36150

**SORRENTO THERAPEUTICS, INC.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)

33-0344842  
(I.R.S. Employer  
Identification No.)

4955 Directors Place  
San Diego, California  
(Address of Principal Executive Offices)

92121  
(Zip Code)

(858) 210-3700

(Registrant's telephone number, including area code)

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

Title of each class	Name of exchange on which registered
Common Stock, par value \$0.0001 per share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.  Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to the filing requirements for at least the past 90 days.  Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
	(Do not check if a smaller reporting company)	Emerging growth company	<input type="checkbox"/>

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.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).  Yes  No

The aggregate market value of voting stock held by non-affiliates of the registrant is calculated based upon the closing sale price of the common stock on June 30, 2016 (the last trading day of the registrant's second fiscal quarter of 2016), as reported on The NASDAQ Capital Market, was approximately \$366.5 million.

At March 9, 2017, the registrant had 50,887,102 shares of common stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

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## EXPLANATORY NOTE

This Amendment No. 2 to Annual Report on Form 10-K/A (this “Amendment No. 2”) is being filed by Sorrento Therapeutics, Inc. (the “Company”) to amend the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which was originally filed with the Securities and Exchange Commission (the “SEC”) on March 22, 2017 (the “Original Annual Report”), and which was amended by the Company’s Amendment No. 1 to Annual Report on Form 10-K/A, which was originally filed with the SEC on March 27, 2017 (“Amendment No. 1”). The Original Annual Report, as amended by Amendment No. 1, is referred to herein as the “Annual Report”.

The Company is filing this Amendment No. 2 solely for the purposes of: (1) including the information required in Part III (Items 10, 11, 12, 13 and 14) of Form 10-K that was previously omitted from the Annual Report in reliance upon General Instruction G(3) to Form 10-K. General Instruction G(3) to Form 10-K allows such omitted information to be filed as an amendment to the Annual Report or incorporated by reference from the Company’s definitive proxy statement which involves the election of directors not later than 120 days after the end of the fiscal year covered by the Annual Report, (2) re-filing revised redacted versions of Exhibits 10.31 and 10.34, and (3) re-filing unredacted versions of Exhibits 10.32 and 10.35 of the Original Annual Report. As of the date of this Amendment No. 2, the Company does not intend to file a definitive proxy statement containing the information required in Part III of Form 10-K within such 120-day period. Accordingly, the Company is filing this Amendment No. 2 to include such omitted information as part of the Annual Report.

The references on the covers of the Original Annual Report and Amendment No. 1 to the incorporation by reference to certain portions of the Company’s Proxy Statement for the 2017 Annual Meeting of Stockholders into Part III of the Annual Report are hereby deleted.

In accordance with Rule 12b-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), Part III, Items 10 through 14 of the Annual Report and Part IV, Item 15 of the Annual Report are hereby amended and restated in their entirety. In addition, as required by Rule 12b-15 promulgated under the Exchange Act, new certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by the Company’s principal executive officer and principal financial officer are filed herewith as exhibits to this Amendment No. 2.

Except as described above, no attempt has been made in this Amendment No. 2 to modify or update the other disclosures in the Annual Report. Other than as specifically stated herein, this Amendment No. 2 continues to speak as of the date of the Original Annual Report, and the Company has not updated the disclosures contained therein to reflect any events which occurred at a date subsequent to the filing of the Original Annual Report. Accordingly, this Amendment No. 2 should be read in conjunction with the Annual Report.

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## PART III

### Item 10. Directors, Executive Officers and Corporate Governance.

#### Board of Directors

The following table sets forth the names, ages as of April 28, 2017, and certain other information for each member of our board of directors (our “Board”):

<u>Name</u>	<u>Age</u>	<u>Position</u>
Henry Ji, Ph.D.	52	Director, President and Chief Executive Officer
William S. Marth	62	Chairman
David H. Deming	64	Director
Kim D. Janda, Ph.D.	59	Director
Jaisim Shah	56	Director
Yue Alexander Wu, Ph.D.	53	Director

**Henry Ji, Ph.D.** co-founded and has served as a director of Sorrento Therapeutics, Inc. since January 2006, served as its Chief Scientific Officer from November 2008 to September 2012, as its Interim Chief Executive Officer from April 2011 to September 2012, and as its Chief Executive Officer and President since September 2012. Dr. Ji also served as our Secretary from September 2009 to June 2011. In 2002, Dr. Ji founded BioVintage, Inc., a research and development company focusing on innovative life science technology and product development, and has served as its President since 2002. From 2001 to 2002, Dr. Ji served as Vice President of CombiMatrix Corporation, a publicly traded biotechnology company that develops proprietary technologies, including products and services in the areas of drug development, genetic analysis, molecular diagnostics and nanotechnology. During his tenure at CombiMatrix, Dr. Ji was responsible for strategic technology alliances with biopharmaceutical companies. From 1999 to 2001, Dr. Ji served as Director of Business Development, and in 2001 as Vice President, of Stratagene Corporation (later acquired by Agilent Technologies, Inc.) where he was responsible for novel technology and product licensing and development. In 1997, Dr. Ji co-founded Stratagene Genomics, Inc., a wholly owned subsidiary of Stratagene Corporation, and served as its President and Chief Executive Officer from its founding until 1999. Dr. Ji previously served as a director of NantKwest, Inc. from December 2014 through November 25, 2015. Dr. Ji is the holder of several issued and pending patents in the life science research field and is the sole inventor of Sorrento Therapeutics Inc.’s intellectual property. Dr. Ji has a Ph.D. in Animal Physiology from the University of Minnesota and a B.S. in Biochemistry from Fudan University.

Dr. Ji has demonstrated significant leadership skills as President and Chief Executive Officer of Stratagene Genomics, Inc. and Vice President of CombiMatrix Corporation and Stratagene Corporation and brings more than 18 years of biotechnology and biopharmaceutical experience to his position on our Board. Dr. Ji’s extensive knowledge of the industry in which we operate, as well as his unique role in our day-to-day operations as our Chief Executive Officer and President, allows him to bring to our Board a broad understanding of the operational and strategic issues we face.

**William S. Marth** has served as a director of our Company since January 2014. He has served as a director of Albany Molecular Research, Inc. since June 2012 and President and Chief Executive Officer since January 1, 2014. Mr. Marth was President and Chief Executive Officer of Teva – Americas through the end of 2012. He previously served as President and Chief Executive Officer of Teva North America from January 2008 to June 2010, as President and Chief Executive Officer of Teva USA from 2005 to 2008 and was previously Executive Vice President and Vice President of Sales and Marketing for Teva USA. Mr. Marth played a significant role in establishing Teva as a leading specialty pharmaceutical company and being ultimately recognized as the worldwide No. 1 producer of generic drugs. In his role, he led the respiratory, neuroscience, oncology and women’s healthcare divisions, as well as Latin America and Canada. He was a member of Teva’s global executive management team and Teva Americas’ board of directors from 2007 until 2013. He brings to this role his global experience in strategic planning, investor relations, research and development, supply chain and regulatory matters. He played a key role in building Teva to a \$12 billion business and in the strategy behind the acquisitions of Cephalon for \$6.8 billion and Barr Pharmaceuticals for \$7.4 billion. Prior to joining Teva USA, he held various positions with the Apothecon division of Bristol-Myers Squibb. Mr. Marth, who earned his B.Sc. in Pharmacy from the University of Illinois in 1977 and his M.B.A. in 1989 from the Keller Graduate School of Management, DeVry University, is a licensed pharmacist and serves on various other boards and committees, including serving on the board of directors of Galmed Pharmaceuticals Ltd. since March 2014. The University of the Sciences in Philadelphia and the Board of Ambassadors for John Hopkins’ Project RESTORE. In addition, Mr. Marth served as the Chairman of the Board of the Generic Pharmaceutical Association (GPhA) in 2008 and 2009 and the American Society for Health-System Pharmacists (ASHP) in 2010.

We believe Mr. Marth's industry expertise, significant transactional expertise and commercial leadership experience provide valuable insight and perspective to our Board and Company.

**David H. Deming** has served as a director of our Company since May 2015. Since March 2013, Mr. Deming has been a banker with TAG Healthcare Advisors, LLC, a boutique financial advisory firm serving the pharmaceutical, biotech and medical device industries. Mr. Deming started his career at J.P. Morgan in 1976 and was a managing director in charge of the Global Healthcare Investment Banking Group from 1991 to 2013. Mr. Deming is a director of Albany Molecular Research, Inc, Cutanea Life Sciences, Inc. and IRX Therapeutics, Inc.

We believe that Mr. Deming's significant transactional and financial experience and relationships in the healthcare field qualify him to serve on our Board.

**Kim D. Janda, Ph.D.** has served as a director of our Company since April 2012. Dr. Janda has served as Ely R. Callaway, Jr. Chaired Professor in the Departments of Chemistry, Immunology and Microbial Science at The Scripps Research Institute since 1996 and as the Director of the Worm Institute of Research and Medicine (WIRM) at The Scripps Research Institute since 2005. Furthermore, Dr. Janda has served as a Skaggs Scholar within the Skaggs Institute of Chemical Biology, also at The Scripps Research Institute, since 1996. Dr. Janda holds a B.S. degree from the University of South Florida in Clinical Chemistry and a doctoral degree from the University of Arizona with Robert B. Bates in natural product total synthesis. A hallmark of his research is that Dr. Janda has been able to uniquely combine principles of medicinal chemistry together with modern molecular biology, immunology and neuropharmacology, allowing the creation of both synthetic/natural molecules and processes with biological, chemical and physical properties. Dr. Janda has published over 425 original publications in refereed journals and founded the biotechnological companies CombiChem, Drug Abuse Sciences and AIPartia. Dr. Janda is associate editor of Bioorg & Med. Chem., PloS ONE and serves, or has served, on numerous journals including J. Comb. Chem., Chem. Reviews, J. Med. Chem., The Botulinum Journal, Bioorg. & Med. Chem. Lett., and Bioorg. & Med. Chem. Over a career of almost 25 years, Dr. Janda has provided numerous seminal contributions and is considered one of the first scientists to merge chemical and biological approaches into a cohesive research program. Dr. Janda serves on the Scientific Advisory Boards of Materia, Inc. and Singapore Ministry of Education (MOE), EP1 Physical Sciences.

Dr. Janda has almost 25 years of experience in life sciences and very strong technical expertise relating to the discovery and development of antibody therapeutics, which gives him a unique understanding of the research challenges and opportunities facing our company. As an experienced scientist and inventor on multiple patents in the life sciences industry, Dr. Janda brings critical insights into the operational requirements of a discovery and development company as well as to our overall business and strategies relating to our ongoing development efforts, and serves as the chair of our Scientific Advisory Board.

**Jaisim Shah** has served as a director of our Company since September 2013. He has more than 25 years of global biopharma experience including over 15 years in senior management leading business development, commercial operations, investor relations, marketing and medical affairs. Mr. Shah currently serves as the Chief Executive Officer and board member at Semnur Pharmaceuticals. Prior to Semnur, Mr. Shah was a consultant to several businesses, including Sorrento Therapeutics, and was the Chief Business Officer of Elevation Pharmaceuticals, where Mr. Shah led a successful sale of Elevation to Sunovion in September 2012. Prior to Elevation, Mr. Shah was president of Zelos Therapeutics, where Mr. Shah focused on financing and business development. Prior to Zelos, Mr. Shah was the Senior Vice President and Chief Business Officer at CytRx, a biopharmaceutical company. Previously, Mr. Shah was Chief Business Officer at Facet Biotech and PDL BioPharma where he completed numerous licensing/partnering and strategic transactions with pharmaceutical and biotech companies. Prior to PDL, Mr. Shah was at Bristol-Myers Squibb, most recently as Vice President of Global Marketing where he received the "President's Award" for completing one of the most significant collaborations in the company's history. Previously, Mr. Shah was at F. Hoffman-La Roche in international marketing and was global business leader for corporate alliances with Genentech and Idec. Mr. Shah holds an M.A. in Economics from the University of Akron and an M.B.A. from Oklahoma University.

We believe that Mr. Shah's extensive operational, executive and business development experience qualifies him to serve on our Board.

**Yue Alexander Wu, Ph.D.** has served as a director of our Company since August 2016. Dr. Wu is co-founder, President, Chief Executive Officer and Chief Scientific Officer of Crown Bioscience International, a leading global drug discovery and development solutions company, which he co-founded in 2006. From 2004 to 2006, Dr. Wu was Chief Business Officer of Starvax International Inc. in Beijing, China, a biotechnology company focusing on oncology and infectious diseases. From 2001 to 2004, Dr. Wu was a banker with Burrill & Company where he was head of Asian Activities. Dr. Wu has served as a director of CASI Pharmaceuticals, Inc. since June 2013. Dr. Wu received his Ph.D. in Molecular Cell Biology and his MBA from University of California at Berkeley. He earned an M.S. in Biochemistry from University of Illinois, Urbana-Champaign and his B.S. in Biochemistry from Fudan University in Shanghai, China.

We believe that Dr. Wu’s scientific background and business experience qualify him to serve on our Board.

#### **Legal Proceedings with Directors**

There are no legal proceedings related to any of our directors which require disclosure pursuant to Items 103 or 401(f) of Regulation S-K.

#### **Agreements with Directors**

None of our directors was selected pursuant to any arrangement or understanding, other than compensation arrangements in the ordinary course of business.

#### **Audit Committee**

We have a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Our Audit Committee is currently comprised of Messrs. Deming and Marth and Dr. Wu. Mr. Deming serves as the Chairperson of the Audit Committee.

Our Board has determined that Mr. Deming is an audit committee financial expert, as defined under applicable SEC rules, and that Messrs. Deming and Marth and Dr. Wu meet the background and financial sophistication requirements under the rules of The NASDAQ Stock Market LLC. In making these determinations, the Board made a qualitative assessment of each of Messrs. Deming’s and Marth’s and Dr. Wu’s level of knowledge and experience based on a number of factors, including his formal education and experience. Both our independent registered public accounting firm and internal financial personnel regularly meet privately with our Audit Committee and have unrestricted access to the Audit Committee.

#### **Director Nominations**

No material changes have been made to the procedures by which security holders may recommend nominees to our Board from those that were described in our Definitive Proxy Statement for our 2016 Annual Meeting of Stockholders that was filed with the SEC on May 13, 2016.

#### **Executive Officers**

The names of our executive officers and their ages as of April 28, 2017, positions, and biographies are set forth below. Dr. Ji’s background is discussed under the section “Board of Directors.”

<b>Name</b>	<b>Age</b>	<b>Position</b>
Henry Ji, Ph.D.	52	Chief Executive Officer, President and Director
Kevin M. Herde	45	Executive Vice President & Chief Financial Officer
George K. Ng	43	Executive Vice President, Chief Administrative Officer & Chief Legal Officer
Jeffrey Su, Ph.D.	53	Executive Vice President & Chief Operating Officer
Jerome Zeldis, M.D., Ph.D.	67	Chief Medical Officer and President of Clinical Development
Miranda Toledano	40	Executive Vice President, Corporate Development

**Kevin M. Herde.** Kevin M. Herde has been our Executive Vice President & Chief Financial Officer since April 2016. From 2012 to February 2016, Mr. Herde was the Vice President of Global Blood Screening and Alliance Management for Hologic, Inc. From April 2002 to August 2012, Mr. Herde served in numerous finance roles with Gen-Probe Incorporated, ultimately as the Vice President of Finance and Corporate Controller. Prior to his 14 years at Gen-Probe and Hologic, Mr. Herde also served in multiple management roles in finance for Gateway, a global computer and technology company, and was an Audit Manager for KPMG LLP. Mr. Herde holds a Bachelor of Business Administration degree from the University of San Diego and is a Certified Public Accountant (CPA).

**George K. Ng.** George K. Ng has been our Executive Vice President, Chief Administrative Officer & Chief Legal Officer since March 2015. From 2012 to 2015, Mr. Ng was Senior Vice President & General Counsel at BioDelivery Sciences International, Inc. From 2010 to 2012, Mr. Ng was in private practice as a partner with two AMLAW 200 law firms, where he had leadership roles, including establishing the life sciences practice group for one firm and heading it as the firmwide co-chair. From 2007 to 2010, Mr. Ng served in numerous legal, compliance, IP and management roles with Spectrum Pharmaceuticals, Inc., ultimately as the Head of Legal, Chief Compliance Officer & Chief IP Counsel. Prior to 2007, Mr. Ng also served in various management and legal roles for Alpharma Inc. (now a part of Pfizer Inc.) and multiple law firms. Mr. Ng obtained his J.D. from the University of Notre Dame and a B.A.S. in Biochemistry and Economics from the University of California, Davis.

**Jeffrey Su, Ph.D.** Jeffrey Su, Ph.D. has been our Executive Vice President & Chief Operating Officer since October 2015. From March 2011 to October 2015, Dr. Su was Chief Scientific and Development Officer for Cytovance Biologics Inc. and from August 2009 to February 2011, he was Vice President of Bioanalytical and Process Development at Cytovance Biologics Inc. He was the Vice President, Product Development for Femta Pharmaceuticals Inc. from June 2008 to May 2009. From January 2007 to May 2008, he was the Deputy Director, Manufacturing Technologies for Sanofi Pasteur Inc.; from August 2004 to November 2006, he was the Senior Director, Manufacturing and Controls, New Products for Cancervax Corp.; from February 2003 to July 2004, he was the Director of Process and Analytical Development for The Dow Chemical Company; from October 2000 to February 2003, he was the Associate Director, Protein Chemistry, for Tanox Inc.; from January 1999 to August 2000, he was the Assistant Director, DSP for Medarex and from April 1995 to December 1998, he was Scientist and Group Leader for Human Genome Sciences Inc. Dr. Su has a Ph.D. in Chemistry from Carleton University in Canada and a M.Sc. in Chemistry from Nankai University in China.

**Miranda Toledano.** Miranda Toledano has been our Executive Vice President of Corporate Development since September 2016. Ms. Toledano joined us with 18 years of principal investment, financing and strategic advisory experience in the biopharmaceutical sector. From 2012 until joining us in September 2016, Ms. Toledano served as Head of Healthcare Investment Banking at MLV & Co., now an FBR company, where she completed over 110 IPO and follow on equity offerings totaling over \$4 billion in aggregate value. Prior to joining MLV, Ms. Toledano served in the investment group of Royalty Pharma where she focused on acquiring best in class biologic therapeutics targeting oncology, auto-immune and neurodegenerative indications. From 1998 to 2003, Ms. Toledano served as a Senior Manager at Ernst & Young (Israel) where she established the Life Sciences Corporate Finance group. Ms. Toledano received a BA in Economics from Tufts University and an MBA in Finance and Entrepreneurship from the NYU Stern School of Business.

**Jerome Zeldis, M.D., Ph.D.** Jerome Zeldis, M.D., Ph.D. has been our Chief Medical Officer and President of Clinical Development since August 2016. Dr. Zeldis joined Sorrento after a nearly 20-year career at Celgene during which he was instrumental in growing Celgene into one of the leading global biopharmaceutical companies. Prior to joining us, Dr. Zeldis held the position of Chief Executive Officer of Celgene Global Health and Chief Medical Officer of Celgene. In that capacity, Dr. Zeldis oversaw clinical trials using Celgene's molecules. Prior to Celgene, Dr. Zeldis was the Associate Director of Clinical Research at Sandoz Research Institute and the Director of Medical Development at Janssen Pharmaceutical Research Institute. Dr. Zeldis received his medical training in Internal Medicine at the UCLA Center for the Health Sciences and was a clinical and research fellow in gastroenterology at Massachusetts General Hospital and Harvard Medical School. Additionally, he served as an Assistant Professor of Medicine at Harvard Medical School, an Associate Professor of Medicine at the University of California, a Clinical Associate Professor of Medicine at Cornell Medical School, and a Professor of Clinical Medicine at the Robert Wood Johnson Medical School in New Brunswick, NJ. Dr. Zeldis holds BA and MS degrees from Brown University, and M.Phil., M.D., and Ph.D. degrees from Yale University. Dr. Zeldis has published 122 peer-reviewed articles and is a named inventor on 43 US patents. He currently serves as Chairman of the board of Alliqua, Semorex, and Trek Therapeutics, Vice Chairman of MetaStat and serves on the boards of Kalytera Therapeutics, BioSig Technologies, IR Biosciences Holdings, PTC Therapeutics and Soligenix.

#### **Family Relationships**

There are no family relationships between or among any of our executive officers or directors.

#### **Code of Ethics**

We have adopted the Sorrento Therapeutics, Inc. Code of Business Conduct and Ethics that applies to all of our employees, executive officers and directors. The Code of Business Conduct and Ethics is available to stockholders on our Internet website at [www.sorrentotherapeutics.com/investors](http://www.sorrentotherapeutics.com/investors) under "Corporate Governance."

If we make any substantive amendments to our Code of Business Conduct and Ethics or grant any waiver from a provision of our Code of Business Conduct and Ethics to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our Internet website at [www.sorrentotherapeutics.com/investors](http://www.sorrentotherapeutics.com/investors) under "Corporate Governance" and/or in our public filings with the SEC.

#### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act, requires our directors and executive officers, and persons who beneficially own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes of ownership of common stock and our other equity securities. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2016, our officers, directors and greater than ten percent beneficial owners complied with all Section 16(a) filing requirements applicable to them, other than a Form 3 and Form 4 filed on behalf of Dr. Zeldis that were due in August 2016 and were filed in November 2016.

## Item 11. Executive Compensation.

### Compensation Discussion and Analysis

#### *Compensation Philosophy*

The primary goals of our Board with respect to executive compensation are to attract and retain talented and dedicated executives, to tie annual and long-term cash and stock incentives to achievement of specified performance objectives, and to create incentives resulting in increased stockholder value. To achieve these goals, our Compensation Committee recommends to our Board executive compensation packages, generally comprising a mix of salary, discretionary bonus and equity awards. Although we have not adopted any formal guidelines for allocating total compensation between equity compensation and cash compensation, we have implemented and maintain compensation plans that tie a substantial portion of our executives' overall compensation to achievement of corporate goals.

#### *Role of Compensation Consultant*

The Compensation Committee has the power to engage independent advisors to assist it in carrying out its responsibilities. In 2016, the Compensation Committee engaged Frederick W. Cook & Co, Inc. ("FW Cook"), a compensation consulting firm, to review and advise on our compensation practices. The Compensation Committee assessed the independence of FW Cook pursuant to SEC rules and concluded that the work of FW Cook has not raised any conflict of interest. FW Cook prepared a report dated August 2016 (the "August 2016 Report") that surveyed the compensation policies of our peer group, including compensation and benefits of our key employees, and comparing the results of the survey with our existing compensation practices. The Compensation Committee used the August 2016 Report as one factor for determining the compensation of our named executive officers during 2016 in order to ensure that the compensation for our named executive officers was set at competitive levels. The Compensation Committee also relied on its members' collective experience and expertise in determining the appropriate levels of compensation.

With respect to compensation determinations made in 2016, our peer group consisted of the following companies, which were determined to: (i) generally have similar revenues as us; (ii) generally have similar market capitalization as us, (iii) generally have the same operating income as us, and (iv) generally have the same number of employees as us:

Advaxis, Inc.	Fortress Biotech, Inc.
Agenus Inc.	ImmunoGen, Inc.
Arrowhead Pharmaceuticals, Inc.	Immunomedics, Inc.
Bellicum Pharmaceuticals, Inc.	Inovio Pharmaceuticals, Inc.
BioTime, Inc.	Juno Therapeutics Inc.
bluebird bio, Inc.	Kite Pharma, Inc.
Coherus BioSciences, Inc.	Lion Biotechnologies, Inc.
Curis, Inc.	NantKwest, Inc.
CytomX Therapeutics, Inc.	OncoMed Pharmaceuticals, Inc.
Dynavax Technologies Corporation	ZIOPHARM Oncology, Inc.

The Compensation Committee pre-approved the peer group to ensure it reflected relevant market capitalization and other factors, including our then-current circumstances.

FW Cook reviewed and advised on all principal aspects of the executive and Board compensation program. Its main responsibilities were to:

- advise on alignment of pay and performance;



- review and advise on executive total compensation, including base salaries, short- and long-term incentives, associated performance goals, and retention and severance arrangements;
- advise on trends in executive compensation;
- advise on Board and Board committee compensation;
- provide recommendations regarding the composition of our peer group;
- analyze peer group proxy statements, compensation survey data and other publicly available data (and apply its experience with other companies to this analysis); and
- perform any special projects requested by the Compensation Committee.

In setting 2016 compensation, the Compensation Committee reviewed the market data presented in the August 2016 Report and compared each named executive officer's base salary, target annual performance bonus and equity compensation value, separately and in the aggregate, to amounts paid to similarly-situated executives at our peer companies. The Compensation Committee believes that targeting compensation towards similarly situated executives at our peer companies helps achieve the compensation objectives described above. However, compensation for each executive may vary from this range depending on other factors the Compensation Committee considers relevant, such as internal pay equity amongst our named executive officers or levels of authority, responsibility and experience of our named executive officers that exceed the norms for individuals holding comparably-titled positions at other companies.

### **Elements of Compensation**

We evaluate individual executive performance with a goal of setting compensation at levels our Board or any applicable committee thereof believes are comparable with executives in other companies of similar size and stage of development while taking into account our relative performance and our own strategic goals. The compensation received by our named executive officers consists of the following elements:

#### ***Base Salary***

Base salaries for our executives are established based on the scope of their responsibilities and individual experience, taking into account competitive market compensation paid by other companies for similar positions within our industry.

The Compensation Committee considers compensation data from the peer companies to the extent the executive positions at these companies are considered comparable to our positions and informative of the competitive environment. Compensation data for our peer group were collected from available proxy-disclosed data. This information was gathered and analyzed for the 25th, 50th and 75th percentiles for annual base salary, short-term incentive pay elements and long-term incentive pay elements.

Based on a review of Dr. Ji's individual performance since joining us in 2006 and the competitive market base pay data for CEOs included in our peer group in the August 2016 Report, effective August 12, 2016, the Compensation Committee increased Dr. Ji's annual base salary to \$550,000. On November 11, 2016, the Company and Dr. Ji agreed to rescind 200,000 of the shares subject to an option to purchase 500,000 shares of common stock granted to Dr. Ji on August 12, 2016. In connection with the rescission of the 200,000 shares subject to the option, the Compensation Committee determined: (a) to increase Dr. Ji's salary to \$600,000 with retroactive effect to January 1, 2016, and (b) to award Dr. Ji a one-time \$200,000 cash bonus.

Based on a review of the competitive market base pay data for chief financial officers included in our peer group in the August 2016 Report, effective August 12, 2016, the base salary of Mr. Herde, our Chief Financial Officer, was increased from \$300,000 to \$330,000.

Mr. Ng, our Executive Vice President, Chief Administrative Officer and Chief Legal Officer, is a party to an employment agreement with us dated December 8, 2014 pursuant to which we pay him an annual base salary of \$450,000. There were no changes to Mr. Ng's base salary during 2016.

Based on a review of the competitive market base pay data for chief operating officers included in our peer group in the August 2016 Report, effective August 12, 2016, the base salary of Dr. Su, our Executive Vice President and Chief Operating Officer, was increased from \$400,000 to \$414,000 with retroactive effect to January 1, 2016.

Dr. Zeldis, our Chief Medical Officer and President of Clinical Development, is paid an annual base salary of \$275,000 pursuant to an offer letter dated August 9, 2016.

### ***Variable Pay***

We design our variable pay programs to be both affordable and competitive in relation to the market. We monitor the market and adjust our variable pay programs as needed. Our variable pay programs, such as our bonus program, are designed to motivate employees to achieve overall goals. Our programs are designed to avoid entitlements, to align actual payouts with the actual results achieved and to be easy to understand and administer.

### ***2016 Bonuses***

Under the terms of our employment agreement with Dr. Ji, Dr. Ji's target annual bonus is equal to 55% of his annual salary. Our employment agreements with each of Mr. Herde, Mr. Ng and Dr. Su each provide that the applicable named executive officer's target annual bonus is equal to 35% of his respective annual salary. Our offer letter with Dr. Zeldis provides that Dr. Zeldis' annual target bonus is equal to 40% of his annual salary.

As of this date of the filing of this Annual Report on Form 10-K, the Compensation Committee has not yet determined the annual bonus amounts, if any, that will be awarded our named executive officers for 2016. We expect the Compensation Committee to assess 2016 performance and determine the 2016 annual bonus awards for our executive officers in May 2017. Once such annual bonus amounts, if any, have been determined, we will, in accordance with Securities and Exchange Commission rules and regulations, file a Current Report on Form 8-K or otherwise disclose the 2016 annual bonus amounts within four business days after the Compensation Committee has assessed 2016 performance and determined the 2016 annual bonus awards for our named executive officers.

### ***Equity-Based Incentives***

Salaries and bonuses are intended to compensate our executive officers for short-term performance. We also have adopted an equity incentive program intended to reward longer-term performance and to help align the interests of our named executive officers with those of our stockholders. We believe that long-term performance is achieved through an ownership culture that rewards performance by our named executive officers through the use of equity incentives. Our equity incentive plan has been established to provide our employees, including our named executive officers, with incentives to help align those employees' interests with the interests of our stockholders.

When making equity-award decisions, the Compensation Committee considers market data, the grant size, the forms of long-term equity compensation available to it under our existing plans and the status of previously granted awards. The amount of equity incentive compensation granted reflects the executives' expected contributions to our future success. Existing ownership levels are not a factor in award determination, as the Compensation Committee does not want to discourage executives from holding significant amounts of our stock.

Future equity awards that we make to our named executive officers will be driven by our sustained performance over time, our named executive officers' ability to impact our results that drive stockholder value, their level of responsibility, their potential to fill roles of increasing responsibility, and competitive equity award levels for similar positions in comparable companies. Equity forms a key part of the overall compensation for each executive officer and is evaluated each year as part of the annual performance review process and incentive payout calculation.

The amounts awarded to the named executive officers are based on the Compensation Committee's subjective determination of what is appropriate to incentivize the executives. Generally, the grants to named executive officers vest over: (i) a four-year period with 25% vesting on each anniversary of the grant date, or (ii) a four-year period with 1/4 of the shares vesting on the first anniversary of the applicable vesting commencement date, and 1/48 of the shares vesting thereafter on a monthly basis. All equity awards to our employees, including named executive officers, and to directors, have been granted and reflected in our financial statements, based upon the applicable accounting guidance, with the exercise price equal to the fair market value of one share of common stock on the grant date.

In March 2016 and August 2016, the Compensation Committee decided to grant long-term equity based incentives in the form of options to purchase shares of common stock to our then current named executive officers. The Compensation Committee considered the August 2016 Report and other data in determining the number of options granted to our named executive officers in August 2016. It is our view that option based awards best align with the interest of our stockholders. The equity awards granted to our named executive officers in 2016 are set forth in the 2016 Summary Compensation Table and Grants of Plan-Based Awards During Fiscal Year 2016 table contained herein.

In order to encourage a long-term perspective and to encourage key employees to remain with us, our stock options typically have annual vesting over a four-year period and a term of ten years. Generally, vesting ends upon termination of services and exercise rights of vested options cease three months after termination of services. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including voting rights and the right to receive dividends or dividend equivalents.

### ***Benefits Programs***

We design our benefits programs to be both affordable and competitive in relation to the market while conforming with local laws and practices. We monitor the market, local laws and practices and adjust our benefits programs as needed. We design our benefits programs to provide an element of core benefits and, to the extent possible, offer options for additional benefits, be tax-effective for employees in each country and balance costs and cost sharing between us and our employees.

### ***Timing of Equity Awards***

Only the Compensation Committee may approve stock option grants to our executive officers. Stock options are generally granted at meetings of the Compensation Committee. On limited occasions, a grant may be made pursuant to a unanimous written consent of the Compensation Committee, which occurs primarily for the purpose of approving a compensation package for a newly hired or promoted executive. The exercise price of a newly granted option is the closing price of our common stock on the date of grant.

### ***Executive Equity Ownership***

We encourage our executives to hold a significant equity interest in our company. However, we do not have specific share retention and ownership guidelines for our executives.

### ***Hedging Policy***

Our Insider Trading and Window Period Policy prohibits our directors, officers and employees, and their family members, from engaging in hedging transactions involving our securities.

### ***Consideration of Advisory Votes to Approve the Compensation of our Named Executive Officers***

We value the opinions of our stockholders, including as expressed through advisory votes to approve the compensation of our named executive officers (“Say-on-Pay Votes”). In our most recent Say-On-Pay Vote, conducted at our 2015 annual meeting of stockholders, held on June 4, 2015, our stockholders approved the compensation of our named executive officers on an advisory basis. We will continue to consider the outcome of future Say-on-Pay Votes, as well as stockholder feedback received throughout the year, when making compensation decisions for our executive officers.

### ***Effect of Accounting and Tax Treatment on Compensation Decisions***

In the review and establishment of our compensation programs, we consider the anticipated accounting and tax implications to us and our executives.

Section 162(m) of the Internal Revenue Code of 1986, as amended, (the “Code”), imposes a limit on the amount of compensation that we may deduct in any one year with respect to our Chief Executive Officer and each of our next three most highly compensated executive officers, excluding the Chief Financial Officer, unless certain specific and detailed criteria are satisfied. Performance-based compensation, as defined in the Code, is fully deductible if the programs are approved by stockholders and meet other requirements. In general, we have determined that, at this time, we will not seek to limit executive compensation so that it is deductible under Section 162(m) of the Code. However, from time to time, we monitor whether it might be in our interests to structure our compensation programs to satisfy the requirements of Section 162(m) of the Code. We seek to maintain flexibility in compensating our executives in a manner designed to promote our corporate goals and, therefore, our Compensation Committee has not adopted a policy requiring that any or all compensation to be deductible. Our Compensation Committee will continue to assess the impact of Section 162(m) of the Code on our compensation practices and determine what further action, if any, is appropriate.

### ***Role of Executives in Executive Compensation Decisions***

The Board and our Compensation Committee generally seek input from our Chief Executive Officer, Dr. Ji, when discussing the performance of, and compensation levels for, executives other than himself. The Compensation Committee also works with Dr. Ji and our Chief Financial Officer to evaluate the financial, accounting, tax and retention implications of our various compensation programs. Neither Dr. Ji nor any of our other executives participate in deliberations relating to his compensation.

## Compensation Risk Management

We have considered the risk associated with our compensation policies and practices for all employees, and we believe we have designed our compensation policies and practices in a manner that does not create incentives that could lead to excessive risk taking that would have a material adverse effect on us for the following reasons:

- We structure our compensation to consist of base salary, variable pay, equity-based pay and benefits. The base portion of compensation is designed to provide a steady income regardless of our stock price performance so that executives do not feel pressured to focus exclusively on stock price performance to the detriment of other important business measures. Our variable pay and equity-based pay programs are designed to reward both short- and long-term corporate performance. For short-term performance, our variable pay programs are designed to motivate employees to achieve overall goals. For long-term performance, our stock option awards generally vest over four years and are only valuable if our stock price increases over time. We believe that these variable elements of compensation are a sufficient percentage of overall compensation to motivate executives to produce superior short- and long-term corporate results, while the fixed element is also sufficiently high that the executives are not encouraged to take unnecessary or excessive risks in doing so.
- Our bonus program has been structured around attainment of overall corporate goals for the past several years and we have seen no evidence that it encourages unnecessary or excessive risk taking.

### SUMMARY COMPENSATION TABLE

The following table provides certain summary information concerning compensation awarded to, earned by or paid to each person who served as our Principal Executive Officer at any time during fiscal year 2016, each person who served as our Principal Financial Officer at any time during fiscal year 2016 and the three other highest paid executive officers whose total annual salary and bonus exceeded \$100,000 for fiscal year 2016 (collectively, the “named executive officers”).

Name and Principal Position	Year	Salary (\$)	Bonus (\$) <sup>(1)</sup>	Option Awards (\$) <sup>(2)</sup>	All Other Compensation (\$) <sup>(3)</sup>	Total (\$)
Henry Ji, Ph.D.	2016	600,000 <sup>(3)</sup>	200,000 <sup>(4)(5)</sup>	1,669,000 <sup>(6)</sup>	—	2,469,000
Chief Executive Officer	2015	500,000	575,000	1,968,800	—	3,043,800
and President	2014	425,000	157,500	286,000	—	868,500
Douglas Langston	2016	200,347	—	38,591 <sup>(8)</sup>	75,104 <sup>(9)</sup>	314,042
Former Vice President, Finance <sup>(7)</sup>	2015	250,000	123,603	777	—	374,380
2014	179,166	—	140,150	—	319,316	
Kevin Herde						
EVP and Chief Financial Officer <sup>(10)</sup>	2016	233,977	— <sup>(5)</sup>	557,700 <sup>(11)</sup>	—	791,677
George K. Ng	2016	450,000	— <sup>(5)</sup>	581,800	101,491 <sup>(13)</sup>	1,133,291
EVP and Chief Administrative Officer and Chief Legal Officer <sup>(12)</sup>	2015	306,875	468,699	19,600	—	795,174
2014	—	—	648,000	—	648,000	
Jeffrey Su, Ph.D.	2016	414,000	100,000 <sup>(5)(15)</sup>	581,800	—	1,095,800
EVP and Chief Operating Officer <sup>(14)</sup>	2015	83,333	81,667	702,070	—	867,070
Jerome Zeldis, M.D., Ph.D. Chief Medical Officer and President of Clinical Development <sup>(16)</sup>	2016	103,128	— <sup>(5)</sup>	858,000	—	961,128

(1) The amounts in the “bonus” column for 2015 and 2014 in our definitive proxy statements filed with the SEC on May 13, 2016 and April 30, 2015, respectively, erroneously reported amounts paid during the respective fiscal year rather than amounts earned for such fiscal years. Accordingly, the amounts in the “bonus” column for 2015 and 2014 have been corrected to reflect amounts earned for services rendered in such years.

(2) These amounts represent the aggregate grant date fair value of awards for grants of options and warrants to each named executive officer in the relevant fiscal year, computed in accordance with FASB ASC Topic 718. The dollar amounts listed do not necessarily reflect the dollar amounts of compensation actually realized or that may be realized by our named executive officers. For a detailed description of the assumptions used for purposes of determining grant date fair value, see Note 13 to the financial statements included in this Annual Report on Form 10-K. These amounts represent the aggregate grant date fair value of awards for grants of options and warrants to each named executive officer in the relevant fiscal year, computed in accordance with FASB ASC Topic 718.

- (3) The amounts included in the “All Other Compensation” and “Total” columns for 2015 and 2014 in our definitive proxy statements filed with the SEC on May 13, 2016 and April 30, 2015, respectively, erroneously included health and welfare benefits that do not discriminate in scope, terms or operation in favor of executive officers or directors of the Company and that are generally available to all of our salaried employees. Such amounts are not included in the “All Other Compensation” and “Total” columns of this Summary Compensation Table.
- (4) On November 11, 2016, the Company and Dr. Ji agreed to rescind 200,000 of the shares subject to an option to purchase 500,000 shares of common stock granted to Dr. Ji on August 12, 2016. In connection with the rescission of the 200,000 shares subject to the option, the Compensation Committee determined: (a) to increase Dr. Ji’s salary to \$600,000 with retroactive effective to January 1, 2016, and (b) to award Dr. Ji a one-time \$200,000 cash bonus.
- (5) Does not include for 2016 the amount of any annual bonuses that may be awarded to our named executive officers as the Compensation Committee has not, as of the date of the filing of this Annual Report on Form 10-K, yet determined the annual bonus amounts, if any, that will be awarded our named executive officers for 2016. See “—Elements of Compensation—Variable Pay—2016 Bonuses” above for a discussion of the target bonus amounts for each named executive officer for fiscal year 2016. We expect the Compensation Committee to assess 2016 performance and determine the 2016 annual bonus awards for our executive officers in May 2017. Once such annual bonus amounts, if any, have been determined, we will, in accordance with Securities and Exchange Commission rules and regulations, file a Current Report on Form 8-K or otherwise disclose the 2016 annual bonus amounts within four business days after the Compensation Committee has assessed 2016 performance and determined the 2016 annual bonus awards for our named executive officers.
- (6) On August 12, 2016, Dr. Ji was granted an option to purchase 500,000 shares of the Company’s common stock. On November 11, 2016, the Company and Dr. Ji agreed to rescind 200,000 of the shares subject to such option. The grant date fair value of the full 500,000 shares of the Company’s common stock subject to the option is included in this column.
- (7) Mr. Langston served as our Vice President, Finance from March 3, 2014. He served as our Principal Financial and Accounting Officer from June 23, 2015 until April 5, 2016. Mr. Langston’s employment with the Company terminated on September 15, 2016.
- (8) The option awards granted to Mr. Langston during the fiscal year ended December 31, 2016 were forfeited upon the termination of Mr. Langston’s employment with the Company on September 15, 2016 as they had not yet vested.
- (9) Consists solely of severance payments.
- (10) Mr. Herde’s employment with us commenced in April 2016.
- (11) Includes options granted by our subsidiary, LA Cell, Inc., to purchase 100,000 shares of LA Cell, Inc. common stock.
- (12) Mr. Ng entered into an employment agreement with us in December 2014 and his employment with the Company commenced in April 2015.
- (13) Consists of \$62,440 for a housing allowance and a tax gross-up in the amount of \$39,051 related thereto.
- (14) Dr. Su’s employment with us commenced in October 2015.
- (15) Consists of a one-time bonus of \$100,000 that was awarded to Dr. Su in August 2016 for the successful completion of the licensing transaction with Servier.
- (16) Dr. Zeldis’ employment with us commenced in August 2016.

#### GRANTS OF PLAN-BASED AWARDS DURING FISCAL YEAR 2016

The following table shows for fiscal year 2016, certain information regarding grants of plan-based awards to our named executive officers:

Named Executive Officer	Grant Date	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise Price Per Share (\$/Sh)	Grant Date Fair Value of Option Awards (\$) <sup>(1)</sup>
Henry Ji, Ph.D.	3/11/2016	100,000	\$ 5.79	\$ 382,000
	8/12/2016	300,000 <sup>(2)</sup>	\$ 6.52	\$ 1,287,000
Douglas Langston <sup>(3)</sup>	2/8/2016	100 <sup>(4)</sup>	\$ 5.93	\$ 391
	3/11/2016	10,000 <sup>(4)</sup>	\$ 5.79	\$ 38,200
	4/5/2016	80,000	\$ 6.21	\$ 327,200
Kevin Herde	8/12/2016	50,000	\$ 6.52	\$ 214,500
	9/13/2016	100,000 <sup>(5)</sup>	\$ 0.20	\$ 16,000
George K. Ng	3/11/2016	40,000	\$ 5.79	\$ 152,800
	8/12/2016	100,000	\$ 6.52	\$ 429,000
Jeffrey Su, Ph.D.	3/11/2016	40,000	\$ 5.79	\$ 152,800
	8/12/2016	100,000	\$ 6.52	\$ 429,000
Jerome Zeldis, M.D., Ph.D. <sup>(6)</sup>	8/12/2016	200,000	\$ 6.52	\$ 858,000



- (1) Amount shown in this column does not reflect dollar amounts actually received by our named executive officer. Instead, this amount represents the aggregate grant date fair value of the stock option awards determined in accordance with FASB ASC Topic 718. The valuation assumptions used in determining the amount is described in Note 13 to our financial statements included in this Annual Report on Form 10-K. Our named executive officer will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options on the date the options are exercised.
- (2) On November 11, 2016, the Company and Dr. Ji agreed to rescind 200,000 of the shares subject to the option to purchase 500,000 shares of the Company's common stock that was granted to Dr. Ji on August 12, 2016.
- (3) Mr. Langston's employment with the Company terminated on September 15, 2016.
- (4) The option awards granted to Mr. Langston during the fiscal year ended December 31, 2016 were forfeited upon the termination of Mr. Langston's employment with the Company on September 15, 2016 as they had not yet vested.
- (5) Represents options granted by LA Cell, Inc.
- (6) Dr. Zeldis joined us as Chief Medical Officer and President of Clinical Development in August 2016.

#### OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table sets forth information for the named executive officers regarding the number of shares subject to both exercisable and unexercisable stock options/warrants, as well as the exercise prices and expiration dates thereof, as of December 31, 2016. Except for the options/warrants set forth in the table below, no other equity awards were held by any our named executive officers as of December 31, 2016.

Name <sup>(1)</sup>	Option/Warrant Award				
	Option/ Warrant Grant Date	Number of Securities Underlying Unexercised Options/ Warrant (#) Exercisable	Number of Securities Underlying Unexercised Earned Options/ Warrant (#) Unexercisable	Option/ Warrant Exercise Price (\$) <sup>(2)</sup>	Option/ Warrant Expiration Date
Henry Ji, Ph.D.	2/16/2010	6,000	—	\$ 1.75	2/15/2020
	2/6/2012	10,000	—	\$ 4.00	2/6/2022
	10/29/2013(3)	87,603	13,397	\$ 8.40	10/29/2023
	10/7/2014(3)	62,916	37,084	\$ 4.32	10/7/2024
	2/24/2015(3)	42,556	37,444	\$ 12.78	2/24/2025
	2/24/2015	80,000	—	\$ 12.78	2/24/2025
	10/30/2015(4)(5)	72,917	427,083	\$ 0.01	10/30/2025
	10/30/2015(6)(5)	72,917	427,083	\$ 0.01	10/30/2025
	5/11/2015(7)(5)	98,958	401,042	\$ 0.01	5/11/2025
	5/11/2015(8)(5)	98,958	401,042	\$ 0.01	5/11/2025
	10/30/2015(9)(5)	572,917	427,083	\$ 0.25	10/30/2025
	10/30/2015(10)(11)	1,400,000	8,100,000	\$ 0.01	10/30/2019
	10/30/2015(12)(11)	1,400,000	8,100,000	\$ 0.01	10/30/2019
	5/11/2015(13)(11)	1,900,000	7,600,000	\$ 0.01	5/11/2019
	5/11/2015(14)(11)	1,900,000	7,600,000	\$ 0.01	5/11/2019
5/11/2015(15)(11)	1,900,000	7,600,000	\$ 0.25	5/11/2019	
3/11/2016(3)	26,736	73,264	\$ 5.79	3/11/2026	
8/12/2016(3)	—	300,000	\$ 6.52	8/12/2026	
Kevin Herde <sup>(16)</sup>	4/5/2016(3)	20,000	60,000	\$ 6.21	4/5/2026
	8/12/2016(3)	—	50,000	\$ 6.52	8/12/2026
	9/13/2016(7)(17)	6,250	93,750	\$ 0.20	9/13/2020
George K. Ng	12/18/2014(3)	69,500	50,500	\$ 8.16	12/18/2024
	10/30/2015(4)(18)	29,167	70,833	\$ 0.01	10/30/2025
	10/30/2015(6)(19)	21,875	53,125	\$ 0.01	10/30/2025
	5/11/2015(7)(18)	79,167	120,833	\$ 0.01	5/11/2025
	5/11/2015(8)(18)	79,167	120,833	\$ 0.01	5/11/2025
	10/30/2015(9)(20)	64,583	35,417	\$ 0.25	5/11/2025
	3/11/2016(3)	10,694	29,306	\$ 5.79	3/11/2026
8/12/2016(3)	—	100,000	\$ 6.52	8/12/2026	
Jeffrey Su, Ph.D.	10/23/2015(3)	18,229	31,771	\$ 8.01	10/23/2025
	7/20/2015(3)	8,611	11,389	\$ 23.99	7/20/2025

	5/6/2015(3)	24,167	25,833	\$	10.41	5/6/2025
	10/30/2015(6)(19)	64,583	235,417	\$	0.01	10/30/2025
	5/11/2015(7)(18)	26,389	40,278	\$	0.01	5/11/2025
	5/11/2015(8)(18)	52,778	80,556	\$	0.01	5/11/2025
	3/11/2016(3)	10,694	29,306	\$	5.79	3/11/2026
	8/12/2016(3)	—	100,000	\$	6.52	8/12/2026
Jerome Zeldis, M.D., Ph.D. (21)	8/12/2016(3)	—	200,000	\$	6.52	8/12/2026



- (1) Douglas Langston, our former Vice President, Finance, has been excluded from this table because he did not hold any outstanding equity awards as of December 31, 2016. Mr. Langston's employment with the Company terminated on September 15, 2016.
- (2) Represents the fair market value of a share of our common stock, as determined by the Board, on the option's grant date.
- (3) All of the options vest and become exercisable over a four-year period, with 1/4 of the shares vesting on the first anniversary of the Vesting Commencement Date, and 1/48 of the shares vesting following each one-month period of the participant's continued employment or service with the Company thereafter.
- (4) Represents options granted by Scintilla Pharmaceuticals, Inc.
- (5) 50% of options vest upon grant and the remainder vest monthly over 96 months.
- (6) Represents options granted by Sorrento Biologics, Inc.
- (7) Represents options granted by LA Cell, Inc.
- (8) Represents options granted by TNK Therapeutics, Inc.
- (9) Represents options granted by Concartis Biosystems, Corp.
- (10) Represents warrants issued by Scintilla Pharmaceuticals, Inc.
- (11) 100,000 warrants vest each month for a period of 40 months beginning on the date of issuance and the remaining warrants vest if certain defined events occur within four years from date of issuance.
- (12) Represents warrants issued by Sorrento Biologics, Inc.
- (13) Represents warrants issued by LA Cell, Inc.
- (14) Represents warrants issued by TNK Therapeutics, Inc.
- (15) Represents warrants issued by Concartis Biosystems Corp.
- (16) Mr. Herde was hired by us as EVP and Chief Financial Officer in April 2016.
- (17) 1/48th of the options vest monthly from the date of grant.
- (18) 1/3 of the options vest immediately upon grant and the remainder vest evenly over 48 months from date of grant.
- (19) 25% of the options vest immediately upon grant and the remainder vest evenly over 48 months from date of grant.
- (20) 50% of the options vest immediately upon grant and the remainder vest evenly over 48 months from date of grant.
- (21) Dr. Zeldis joined us as Chief Medical Officer and President of Clinical Development in August 2016.

#### **OPTION EXERCISES AND STOCK VESTED**

No stock options were exercised and no shares subject to stock awards vested during the fiscal year ended December 31, 2016.

#### **PENSION BENEFITS-NONQUALIFIED DEFINED CONTRIBUTION AND OTHER NONQUALIFIED DEFERRED COMPENSATION**

No pension benefits were paid to any of our named executive officers during fiscal 2016. We do not currently sponsor any non-qualified defined contribution plans or non-qualified deferred compensation plans.

#### **Employment, Severance, Separation and Change in Control Agreements**

##### **Chief Executive Officer Compensation for Fiscal Year 2016**

We are a party to an employment agreement with Dr. Ji, dated September 21, 2012, as amended on October 18, 2012. Initially, pursuant to the terms of the employment agreement for Dr. Ji, his base salary was set at \$375,000. On October 18, 2012, Dr. Ji's base salary was set at \$262,500, subject to adjustment. In 2015, Dr. Ji's salary was set at \$500,000. Effective August 12, 2016, Dr. Ji's salary was increased to \$550,000. On November 11, 2016, the Company and Dr. Ji agreed to rescind 200,000 of the shares subject to an option to purchase 500,000 shares of common stock granted to Dr. Ji on August 12, 2016. In connection with the rescission of the 200,000 shares subject to the option, the Compensation Committee determined: (a) to increase Dr. Ji's salary to \$600,000 with retroactive effective to January 1, 2016, and (b) to award Dr. Ji a one-time \$200,000 cash bonus. Additionally, his target annual bonus is set at 55% of his annual salary.



We have the right to terminate Dr. Ji's employment at any time with or without "cause" or upon his death or disability, each as defined in the employment agreement. Dr. Ji may resign with or without "good reason", as defined in the employment agreement, upon 30 days written notice. Under such circumstances, Dr. Ji will be entitled to receive any accrued but unpaid base salary as of the date of termination or resignation, any expenses owed to him and any amount accrued and arising from his participation in, or vested benefits accrued under, any employee benefit plans, programs or arrangements. The employment agreement also includes provisions regarding severance. If Dr. Ji is terminated without cause or resigns for good reason, he will also be entitled to 12 months of his then-applicable base salary paid in a lump sum and 12 months of health care benefits continuation at our expense. If we terminate Dr. Ji for cause or he resigns without good reason, he shall not be entitled to further compensation. He shall have no obligation to seek other employment and any income so earned shall not reduce the foregoing amounts.

#### **Employment Agreements with Other Executive Officers**

##### *Employment Agreement with Kevin Herde*

We are a party to an employment agreement dated April 5, 2016 with Kevin Herde, our Executive Vice President and Chief Financial Officer. The employment agreement for Mr. Herde originally provided for an annual base salary of \$300,000. Effective August 12, 2016, Mr. Herde's salary was increased to \$330,000. His target annual bonus is currently set at 35% of his annual salary.

We have the right to terminate Mr. Herde's employment at any time with or without "cause" or upon his death or disability, each as defined in the employment agreement. Mr. Herde may resign with or without "good reason", as defined in the employment agreement. Under such circumstances, Mr. Herde will be entitled to receive any accrued but unpaid base salary as of the date of termination or resignation, any expenses owed to him and any amount accrued and arising from his participation in, or vested benefits accrued under, any employee benefit plans, programs or arrangements. The employment agreement also includes provisions regarding severance. If Mr. Herde is terminated without cause or resigns for good reason, he will also be entitled to 12 months of his then-applicable base salary payable in accordance with the Company's standard payroll practices and 12 months of health care benefits continuation at our expense. If we terminate Mr. Herde for cause or he resigns without good reason, he shall not be entitled to further compensation. He shall have no obligation to seek other employment and any income so earned shall not reduce the foregoing amounts.

##### *Employment Agreement with George K. Ng*

We are a party to an employment agreement dated December 8, 2014 with George K. Ng, our Executive Vice President, Chief Administrative Officer and Chief Legal Officer. The employment agreement for Mr. Ng provides for an annual base salary of \$345,000, which was most recently increased to \$450,000 in July 2015. Mr. Ng's employment agreement also provides for the reimbursement of relocation related costs and for a housing allowance of up to \$20,000 annually until such time that full relocation has occurred. Additionally, his target annual bonus is currently set at 35% of his annual salary.

We have the right to terminate Mr. Ng's employment at any time with or without "cause" or upon his death or disability, each as defined in the employment agreement. Mr. Ng may resign with or without "good reason", as defined in the employment agreement. Under such circumstances, Mr. Ng will be entitled to receive any accrued but unpaid base salary as of the date of termination or resignation, any expenses owed to him and any amount accrued and arising from his participation in, or vested benefits accrued under, any employee benefit plans, programs or arrangements. The employment agreement also includes provisions regarding severance. If Mr. Ng is terminated without cause or resigns for good reason, he will also be entitled to 12 months of his then-applicable base salary payable in accordance with the Company's standard payroll practices and 12 months of health care benefits continuation at our expense. In addition, all of his unvested stock options will immediately vest. If we terminate Mr. Ng for cause or he resigns without good reason, he shall not be entitled to further compensation. He shall have no obligation to seek other employment and any income so earned shall not reduce the foregoing amounts.

##### *Employment Agreement with Jeffrey Su, Ph.D.*

We are a party to an employment agreement dated October 16, 2015 with Jeffrey Su, Ph.D., our Executive Vice President and Chief Operating Officer. The employment agreement for Dr. Su provides for an annual base salary of \$400,000. Effective August 12, 2016, Dr. Su's salary was increased to \$414,000. Additionally, his target annual bonus is currently set at 35% of his annual salary.

We have the right to terminate Dr. Su's employment at any time with or without "cause" or upon his death or disability, each as defined in the employment agreement. Dr. Su may resign with or without "good reason", as defined in the employment agreement. Under such circumstances, Dr. Su will be entitled to receive any accrued but unpaid base salary as of the date of termination or resignation, any expenses owed to him and any amount accrued and arising from his participation in, or vested benefits accrued under, any employee benefit plans, programs or arrangements. The employment agreement also includes provisions regarding severance. If Dr. Su is terminated without cause or resigns for good reason, he will also be entitled to 12 months of his then-applicable base salary payable in accordance with the Company's standard payroll practices and 12 months of health care benefits continuation at our expense. If we terminate Dr. Su for cause or he resigns without good reason, he shall not be entitled to further compensation. He shall have no obligation to seek other employment and any income so earned shall not reduce the foregoing amounts.

*Offer Letter with Jerome Zeldis, M.D., Ph.D.*

We are party to an offer letter dated August 9, 2016 with Jerome Zeldis, M.D., Ph.D., our Chief Medical Officer and President of Clinical Development. The offer letter provides that Dr. Zeldis is employed by us on a part-time (20 hours per week) basis and that Dr. Zeldis is entitled to an annual base salary of \$275,000. Additionally, the offer letter provides that Dr. Zeldis' annual target bonus shall be equal to 40% of his annual salary. In accordance with the terms of the offer letter, on August 12, 2016, Dr. Zeldis was granted options to purchase 200,000 shares of our common stock.

Dr. Zeldis' offer letter does not provide for payments or benefits upon termination or a change in control.

**POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL**

Other than the provisions of the executive severance benefits to which our named executive officers would be entitled to at December 31, 2016 as set forth above, we have no liabilities under termination or change in control conditions. We do not have a formal policy to determine executive severance benefits. Each executive severance arrangement is negotiated on an individual basis.

The tables below estimate the current value of amounts payable to our named executive officers in the event that a termination of employment occurred on December 31, 2016. The closing price of our common stock, as reported on the NASDAQ Capital Market, was \$4.90 on December 30, 2016. The following tables exclude certain benefits, such as accrued vacation, that are available to all employees generally. The actual amount of payments and benefits that would be provided can only be determined at the time of a change in control and/or the named executive officer's qualifying separation from Sorrento.

***Henry Ji, Ph.D.***

	<b>By Sorrento Without Cause or by Dr. Ji for Good Reason</b>
Cash Payments	\$ 600,000
Continuation of Benefits	20,400
Total Cash Benefits and Payments	<u>\$ 620,400</u>

***Kevin Herde***

	<b>By Sorrento Without Cause or by Mr. Herde for Good Reason</b>
Cash Payments	330,000
Continuation of Benefits	\$ 20,400
Total Cash Benefits and Payments	<u>\$ 350,400</u>

***George K. Ng***

	<b>By Sorrento Without Cause or by Mr. Ng for Good Reason</b>
Cash Payments	450,000
Continuation of Benefits	\$ 20,400
Total Cash Benefits and Payments	<u>\$ 470,400</u>

Jeffrey Su, Ph.D.

	<b>By Sorrento Without Cause or by Dr. Su for Good Reason</b>
Cash Payments	\$ 414,000
Continuation of Benefits	20,400
<b>Total Cash Benefits and Payments</b>	<b>\$ 434,400</b>

Jerome Zeldis, M.D., Ph.D.

Dr. Zeldis's offer letter does not provide for payments or benefits upon termination or a change in control.

## DIRECTOR COMPENSATION

The following table sets forth summary information concerning the total compensation paid to our non-employee directors in 2016 for services to our company.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) <sup>(1)</sup>	All Other Compensation (\$)	Total (\$)
Jaisim Shah	48,226	148,050	—	196,276
Dr. Kim Janda	69,099	148,050	—	217,149
William Marth	97,892	207,270	—	305,162
Douglas Ebersole <sup>(2)</sup>	43,785	148,050	90,000 <sup>(3)</sup>	281,835
David H. Deming	75,796	180,050 <sup>(4)</sup>	—	255,846
Yue Alexander Wu <sup>(5)</sup>	18,750	144,900	—	163,650

(1) These amounts represent the aggregate grant date fair value of awards for grants of options to each listed director for the fiscal year ended December 31, 2016, computed in accordance with FASB ASC Topic 718. These amounts do not represent the actual amounts paid to or realized by the directors during the fiscal year ended December 31, 2016. The value as of the grant date for stock options is recognized over the number of months of service required for the stock option to vest in full. For a detailed description of the assumptions used for purposes of determining grant date fair value, see Note 13 to the financial statements included in this Annual Report on Form 10-K. As of December 31, 2016, our non-employee directors held options to purchase the following number of shares of common stock: Mr. Shah – 305,000; Dr. Janda – 132,400; Mr. Marth – 182,000; Mr. Deming – 70,000; and Dr. Wu – 35,000.

(2) Mr. Ebersole resigned from our Board on August 1, 2016.

(3) This amount represents severance payments to Mr. Ebersole in connection with the termination of his service as a member of our Board.

(4) Includes options granted by our subsidiary, LA Cell, Inc., to purchase 200,000 shares of LA Cell, Inc. common stock.

(5) Dr. Wu was appointed to our Board on August 1, 2016.

### Prior Outside Director Compensation Policy

Our prior outside director compensation policy provided that each non-executive director was entitled to receive a \$45,000 (or \$90,000 in the case of our chairman) annual cash retainer. Further, the chairman of each of our Audit, Compensation and Corporate Governance and Nominating Committees received an additional annual cash retainer of \$20,000, \$20,000 and \$10,000, respectively. Other members of our Audit, Compensation and Corporate Governance and Nominating Committees received an additional annual cash retainer of \$8,000, \$8,000 and \$5,000, respectively. New directors received a one-time initial grant of a stock option to purchase 25,000 shares of common stock upon joining our Board, with all of the options vesting upon the one year anniversary of the date of grant. In addition, each non-executive director received an annual grant of a stock option to purchase 25,000 shares of common stock, which vested monthly over a period of 12 months from the date of grant, subject to continued service through the vesting dates. Further, the chairman of each of our Audit, Compensation and Corporate Governance and Nominating Committees received an additional annual stock option grant of 6,000, 6,000 and 3,000 shares, respectively. Other members of our Audit, Compensation and Corporate Governance and Nominating Committees received an annual stock option grant of 3,000, 3,000 and 2,000 shares, respectively. Additionally, we reimbursed each outside director for reasonable travel expenses related to such director's attendance at Board and committee meetings.

### New Outside Director Compensation Policy

Effective July 11, 2016, we adopted a new compensation policy for our outside directors. Under the new policy, each non-executive director is entitled to receive a \$55,000 annual cash retainer, with the amount being increased to \$78,000 for any Lead Director and \$100,000 for our Board chairman. Further, the chairman of each of our Audit, Compensation and Transaction Committees receives an additional annual cash retainer of \$25,000. Other members of our Audit, Compensation and Transaction Committees receive an additional cash retainer of \$10,000. In addition, each non-executive director will be entitled to receive an annual grant of a

stock option to purchase 35,000 (or 49,000 in the case of our chairman; subject to adjustment to the extent that our Amended and Restated 2009 Stock Incentive Plan limits the number of shares that may be subject to awards granted under the 2009 Plan to any non-employee director in any calendar year) shares of common stock, which vests monthly over a period of 12 months from the date of grant, subject to continued service through each vesting date.

## Other Compensation

We intend to provide benefits and perquisites for our named executive officers at levels comparable to those provided to other executive officers in our industry. Our Board or any applicable committee thereof, in its discretion, may revise, amend or add to the benefits and perquisites of any named executive officer as it deems it advisable and in the best interest of the Company and our stockholders.

## Compensation Committee Interlocks and Insider Participation

Our Compensation Committee consists of three directors, each of whom is a non-employee director: Messrs. Marth and Deming and Dr. Wu. During 2016, none of the aforementioned individuals was an officer or employee of ours, was formerly an officer of ours or had any relationship requiring disclosure by us under Item 404 of Regulation S-K. No interlocking relationship as described in Item 407(e)(4) of Regulation S-K exists between any of our executive officers or Compensation Committee members, on the one hand, and the executive officers or compensation committee members of any other entity, on the other hand, nor has any such interlocking relationship existed in the past.

## Compensation Committee Report

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K of the SEC's rules and regulations with management and, based on such review and discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

## Compensation Committee

Mr. William Marth  
Mr. David H. Deming  
Dr. Yue Alexander Wu

*The foregoing Compensation Committee Report shall not be deemed to be "soliciting material," deemed "filed" with the SEC or subject to the liabilities of Section 18 of the Exchange Act. Notwithstanding anything to the contrary set forth in any of the Company's previous filings under the Securities Act of 1933, as amended, or the Exchange Act that might incorporate by reference future filings, including this Annual Report on Form 10-K, in whole or in part, the foregoing Compensation Committee Report shall not be incorporated by reference into any such filings.*

## Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information as of March 31, 2017, with respect to the beneficial ownership of shares of our common stock by:

- each person or group known to us to be the beneficial owner of more than five percent of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current directors and executive officers as a group.

This table is based upon information supplied by officers, directors and principal stockholders and a review of Schedules 13D and 13G, if any, filed with the SEC. Other than as set forth below, we are not aware of any other beneficial owner of more than five percent of our common stock as of March 31, 2017. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 50,887,102 shares of common stock outstanding as of March 31, 2017, adjusted as required by rules promulgated by the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options that are either immediately exercisable or exercisable on or before May 30, 2017, which is 60 days after March 31, 2017. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise noted below, the address of each beneficial owner listed in the table is c/o Sorrento Therapeutics, Inc., 4955 Directors Place, San Diego, California 92121.

<b>Name of Beneficial Owner</b>	<b>Beneficial Ownership of Common Stock</b>	
	<b>Number of Shares</b>	<b>Percentage of Class</b>
<b>Named Executive Officers and Directors:</b>		
Dr. Henry Ji, Director, Chief Executive Officer and President	2,439,236(1)	4.8%
Douglas Langston, Former Vice President, Finance <sup>(2)</sup>	—	—
Kevin Herde, EVP and Chief Financial Officer	27,000(3)	*
George K. Ng, EVP, Chief Administrative Officer and Chief Legal Officer	144,433(4)	*
Jeffrey Su, Ph.D., Chief Operating Officer	74,701(5)	*
Jerome Zeldis, M.D., Ph.D., Chief Medical Officer and President of Clinical Development	10,000(6)	*
William Marth, Chairman of the Board	168,797(7)	*
David Deming, Director	70,000(8)	*
Dr. Kim Janda, Director	125,969(9)	*
Jaisim Shah, Director	398,200(10)	*
Yue Alexander Wu, Director	29,944(11)	*
<b>All Current Officers and Directors as a Group (11 Persons)</b>	<b>3,488,280(12)</b>	<b>6.7%</b>
<b>5% Stockholders:</b>		
Wildcat Capital Management, LLC	2,676,193(13)	5.3%
Fan Yu	6,487,940(14)	12.4%

\* Less than 1%.

- (1) Comprised of (i) 39,776 shares of common stock held directly, (ii) 67,931 shares of common stock held by an entity of which Dr. Ji and his wife Vivian Q. Zhang are the sole members and managing directors, (iii) 2,053,162 shares of common stock held in family trusts, of which Dr. Ji is a co-trustee with his wife Vivian Q. Zhang, and (iv) 278,367 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017. Each of Dr. Ji and Vivian Q. Zhang, while acting as co-trustees, have the power to act alone and have those actions binding on both trustees' and the trusts' assets, including voting and dispositive power over the shares of common stock held by the family trusts.
- (2) Mr. Langston's employment with the Company terminated on September 15, 2016.
- (3) Comprised of (i) 7,000 shares of common stock held directly, and (ii) 20,000 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (4) Comprised of (i) 49,338 shares of common stock held directly, (ii) 3,448 shares of common stock held by Peng Ventures, LLC, (iii) 11,453 shares of common stock held by Ng Cha Family Trust, a family trust of which the Mr. Ng is a co-trustee with his wife, and (iv) 80,194 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (5) Comprised of (i) 13,000 shares of common stock held directly, and (ii) 61,701 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (6) Comprised of 10,000 shares of common stock held directly.
- (7) Comprised of 168,797 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (8) Comprised of 70,000 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (9) Comprised of (i) 3,000 shares of common stock held directly, and (ii) 122,969 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (10) Comprised of (i) 102,631 shares of common stock held directly, and (ii) 295,569 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.



- (11) Comprised of (i) 5,000 shares of common stock held directly, and (ii) 24,944 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 31, 2017.
- (12) Comprised of shares included under “Named Executive Officers and Directors”. None of our other executive officers hold shares of our common stock or stock options that are exercisable within 60 days after March 31, 2017.
- (13) The indicated ownership is based solely on a Schedule 13G filed with the SEC by the reporting person on February 14, 2017. According to the Schedule 13G, the reporting person beneficially owns 2,676,193 shares of common stock. Wildcat – Liquid Alpha, LLC (“WLA”) holds 184,000 shares of common stock (the “WLA Shares”) and Bonderman Family Limited Partnership (“BFLP”) holds 2,492,193 shares of common stock (the “BFLP Shares”). Wildcat Capital Management, LLC (“Wildcat”) may be deemed to beneficially own the WLA Shares and the BFLP Shares based on having voting power, which includes the power to vote or to direct the voting of such shares, and investment power, which includes the power to dispose, or direct the disposition of, such shares, pursuant to the terms of each of the WLA and BFLP operating agreements and an investment management agreement by and between Wildcat and each of WLA and BFLP, respectively. Pursuant to the terms of the investment management agreement, each of WLA and BFLP (i) delegates investment power with respect to the WLA Shares and the BFLP Shares, respectively, to Wildcat and (ii) may direct Wildcat to proscribe a particular investment, investment strategy or investment type. The investment management agreement can be terminated by BFLP or WLA upon 15 days’ prior written notice or by Wildcat upon 90 days’ prior written notice. BFLP owns a majority of the outstanding membership interests of WLA and may be deemed to beneficially own the WLA Shares.

Infinity Q Capital Management, LLC (“IQCM”) may be deemed to beneficially own 123,597 shares of common stock held by Infinity Q Diversified Alpha Fund (“IQDA”) (the “IQDA Shares”) based on having voting power, which includes the power to vote or to direct the voting of such shares, and investment power, which includes the power to dispose, or direct the disposition of, such shares, pursuant to the terms of an investment management agreement by and between IQCM and Trust for Advised Portfolios on behalf of IQDA. Pursuant to the terms of the investment management agreement, IQDA (i) delegates investment power with respect to the IQDA Shares to IQCM and (ii) may direct IQCM to proscribe a particular investment, investment strategy or investment type. The investment management agreement can be terminated by either party upon 60 days’ prior written notice. As the members of IQCM, each of BFLP and Infinity Q Management Equity, LLC (“IQME”) has the right to appoint one manager of IQCM, and each of BFLP and IQME may be deemed to beneficially own the IQDA Shares. Mr. Velissaris is the sole manager of IQME. Because of the relationship of Mr. Velissaris to IQME, Mr. Velissaris may be deemed to beneficially own the IQDA Shares.

Mr. Potter is an officer and the sole member of Wildcat. Because of the relationship of Mr. Potter to Wildcat, Mr. Potter may be deemed to beneficially own the WLA Shares and the BFLP Shares. Messrs. Potter and Velissaris are co-managers, and Chief Executive Officer and Chief Investment Officer, respectively, of IQCM. Because of the relationship of Messrs. Potter and Velissaris to IQCM, each of Messrs. Potter and Velissaris may be deemed to beneficially own the IQDA Shares. IQCM is managed separately and operated independently of Wildcat. IQCM employs its own investment strategy and operates in accordance with its own investment mandate, including the independent exercise of voting and investment powers with respect to securities held directly by IQDA. Accordingly, (i) each of Wildcat and WLA disclaims beneficial ownership of any shares of common stock beneficially owned by IQCM, IQME, IQDA and Mr. Velissaris, (ii) except to the extent indicated herein in respect of shares of common stock that WLA holds, WLA disclaims beneficial ownership of any shares of Common Stock beneficially owned by Wildcat, BFLP and Mr. Potter and (iii) each of IQCM, IQME, IQDA and Mr. Velissaris disclaims beneficial ownership of any shares of Common Stock beneficially owned by Wildcat or WLA, and, except to the extent indicated herein in respect of shares of Common Stock that IQCM, IQME, IQDA or Mr. Velissaris hold, any shares of Common Stock beneficially owned by BFLP and Mr. Potter. The principal business address of each of Wildcat, IQCM, IQME, IQDA, Leonard A. Potter and James Velissaris is 888 7th Avenue, 37th Floor, New York, New York 10106. The principal business address of each of BFLP and WLA is 301 Commerce Street, Suite 3150, Fort Worth, Texas 76102.

- (14) The indicated ownership is based solely on a Schedule 13G filed with the SEC by the reporting person on June 10, 2016. According to the Schedule 13G, the reporting person beneficially owns 5,082,536 shares of common stock and warrants to purchase 1,405,404 shares of common stock. ABG II—SO Limited (“ABG II—SO”) directly holds 397,853 shares of common stock (the “ABG II—SO Shares”). ABG II—SO is a wholly-owned subsidiary of Ally Bridge Group Capital Partners II, L.P. (“ABG II”). ABG Management Ltd. is the manager of ABG II, and Mr. Fan Yu is the sole shareholder and director of ABG Management Ltd.

Ally Bridge LB Healthcare Master Fund Limited (“ABG LB”) directly holds 1,441,441 shares of common stock and warrants to purchase 432,432 shares of common stock (the “ABG LB Shares and Warrants”). Ally Bridge LB Management Limited controls ABG LB, and Mr. Bin Li and Mr. Fan Yu are the shareholders and directors of Ally Bridge LB Management Limited.

ABG SRNE Limited (“ABG SRNE”) directly holds 3,243,242 shares of common stock and warrants to purchase 972,972 shares of common stock (the “ABG SRNE Shares and Warrants”). Ally Bridge Group Innovation Capital Partners III, L.P. (“ABG III”) owns the sole voting share in ABG SRNE. ABG Management Ltd. is the manager of ABG III.

ABG Management Ltd., by virtue of being the manager of ABG II and ABG III, may be deemed to have voting control and investment discretion over the ABG—SO Shares and the ABG SRNE Shares and Warrants. Mr. Bin Li, by virtue of being a director and executive officer of ABG LB, and a director and shareholder of Ally Bridge LB Management Limited, may be deemed to have voting control and investment discretion over the ABG LB Shares and Warrants. Mr. Fan Yu, by virtue of being a director of ABG LB, a director and shareholder of Ally Bridge LB Management Limited, and the sole shareholder and director of ABG Management Ltd., may be deemed to have voting control and investment discretion over the ABG II—SO Shares, the ABG LB Shares and Warrants, and the ABG SRNE Shares and Warrants. The address of the principal business office of ABG II—SO, ABG II, ABG LB, Ally Bridge LB Management Limited, ABG SRNE, ABG III, ABG Management Ltd., Mr. Bin Li, and Mr. Fan Yu is Unit 3002-3004, 30th Floor, Gloucester Tower, The Landmark, 15 Queen’s Road Central, Hong Kong.

## SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth additional information with respect to the shares of common stock that may be issued upon the exercise of options and other rights under our existing equity compensation plans and arrangements in effect as of December 31, 2016. The information includes the number of shares covered by, and the weighted average exercise price of, outstanding options and the number of shares remaining available for future grant, excluding the shares to be issued upon exercise of outstanding options.

### Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders <sup>(1)</sup>	4,332,876	\$ 7.86	1,414,220(2)
Equity compensation plans not approved by security holders <sup>(3)</sup>	3,200	1.12	—
<b>Total</b>	<b>4,336,076</b>	<b>N/A</b>	<b>1,414,220</b>

(1) Comprised of the 2009 Plan.

(2) Comprised solely of shares subject to awards available for future issuance under the 2009 Plan. In June 2014, our stockholders approved, among other items, the amendment and restatement of the 2009 Plan to increase the number of common stock authorized to be issued pursuant to the 2009 Plan to 3,760,000. In June 2016, the Company’s stockholders approved, among other items, another amendment and restatement of the 2009 Plan to increase the number of common shares authorized to be issued pursuant to the 2009 Plan to 6,260,000. Such shares of common stock are reserved for issuance to our employees, non-employee directors and consultants. As of December 31, 2016, 6,260,000 shares were authorized under the 2009 Plan, with 1,414,220 shares remaining available for future issuance under the 2009 Plan.

(3) Comprised solely of shares issued to non-employee directors prior to our adoption of the 2009 Plan.

## Item 13. Certain Relationships and Related Transactions, and Director Independence.

### Review, Approval or Ratification of Transactions with Related Persons

The Board conducts an appropriate review of and oversees all related party transactions on a continuing basis and reviews potential conflict of interest situations where appropriate. The Board has not adopted formal standards to apply when it reviews, approves or ratifies any related party transaction. However, the Board has followed the following standards: (i) all related party transactions must be fair and reasonable and on terms comparable to those reasonably expected to be agreed to with independent third parties for the same goods and/or services at the time they are authorized by the Board and (ii) all related party transactions should be authorized, approved or ratified by the affirmative vote of a majority of the directors who have no interest, either directly or indirectly, in any such related party transaction.

### Transactions with Related Persons

The following is a description of transactions or series of transactions since January 1, 2016, or any currently proposed transaction, to which we have been a party, in which the amount involved in the transaction or series of transactions exceeds \$120,000 and in which any of our directors, executive officers or persons who we know held more than five percent of any class of our capital stock, including their immediate family members, had or will have a direct or indirect material

interest, other than compensation arrangements that are described under “Employment Agreements” above.

### **Joint Venture with Yuhan Corporation**

In March 2016, we entered into an agreement with Yuhan Corporation (“Yuhan”) to form a joint venture company called ImmuneOncia Therapeutics, LLC, to develop and commercialize a number of immune checkpoint antibodies against undisclosed targets for both hematological malignancies and solid tumors. As of December 31, 2016, the carrying value of the Company’s investment in ImmuneOncia Therapeutics, LLC was approximately \$9.5 million. At the time we entered into the agreement, Yuhan held more than five percent of our outstanding common stock.

### **2016 Private Investment in Public Entity Financing**

On April 3, 2016, we entered into a Securities Purchase Agreement (the “Yuhan Purchase Agreement”) with Yuhan, pursuant to which, among other things, we agreed to issue and sell in a private placement transaction, 1,801,802 shares of our common stock to Yuhan, along with a warrant to purchase 235,294 shares of our common stock, for an aggregate purchase price of \$10,000,000. The warrants issued pursuant to the Yuhan Purchase Agreement had an exercise price of \$8.50 per share, were immediately exercisable upon issuance, had a term of three years and were exercisable on a cash or cashless exercise basis.

Under the terms of the Yuhan Purchase Agreement, Yuhan had the right to demand, at any time beginning six months after the closing of the transaction contemplated by the Yuhan Purchase Agreement, that we prepare and file with the SEC a registration statement to register for resale Yuhan’s shares of our common stock purchased pursuant to the Yuhan Purchase Agreement and the shares of our common stock issuable upon exercise of Yuhan’s warrants issued pursuant to the Yuhan Purchase Agreement. In addition, we may be required to effect certain registrations to register for resale such shares in connection with certain “piggy-back” registration rights granted to Yuhan.

On April 29, 2016, as a condition to the closing of the transaction contemplated by the Yuhan Purchase Agreement, we entered into a Voting Agreement with Yuhan, pursuant to which Yuhan agreed, among other things, to, at any meeting of our stockholders or in any circumstance upon which the consent of our stockholders is solicited, vote all of the shares acquired pursuant to the Yuhan Purchase Agreement, and any additional shares of our common stock or other voting securities then-beneficially owned by Yuhan, with respect to each matter presented to our stockholders, as instructed to Yuhan by our Board.

On May 2, 2016, we closed our private placement of common stock and warrants with Yuhan for gross proceeds of \$10,000,000. Yuhan purchased 1,801,802 shares of our common stock at \$5.55 per share and a warrant to purchase 235,294 shares of common stock. The warrant was exercisable for three years at an exercise price of \$8.50 per share.

### **Scilex Pharmaceuticals, Inc. Acquisition**

On November 8, 2016, we entered into a Stock Purchase Agreement with Scilex Pharmaceuticals, Inc. (“Scilex”) and a majority of the stockholders of Scilex (the “Scilex Stockholders”) pursuant to which we acquired from the Scilex Stockholders approximately 72% of the outstanding capital stock of Scilex. Dr. Henry Ji, our President and Chief Executive Officer and a member of our Board of Directors, and George K. Ng, our Vice President, Chief Administrative Officer and Chief Legal Officer, were stockholders of Scilex prior to the acquisition transaction.

### **Binding Term Sheet Regarding Acquisition of Semnur Pharmaceuticals, Inc.**

On August 15, 2016, we, our subsidiary Scintilla Pharmaceuticals, Inc. (“Scintilla”), and Semnur Pharmaceuticals, Inc. (“Semnur”) entered into a binding term sheet (the “Semnur Binding Term Sheet”) setting forth the terms and conditions by which Scintilla will, through a subsidiary, purchase all of the issued and outstanding equity of Semnur (the “Semnur Acquisition”). As of March 22, 2017, the Semnur Acquisition had not closed. The final terms of the Semnur Acquisition are subject to the negotiation and finalization of a definitive agreement and any other agreements relating to the Semnur Acquisition, and the material terms of the Semnur Acquisition are expected to differ from those set forth in the Semnur Binding Term Sheet. In addition, the Semnur Closing will be subject to various customary and other closing conditions. Jaisim Shah, a member of our Board of Directors, is Semnur’s Chief Executive Officer, a member of Semnur’s Board of Directors, and a stockholder of Semnur.

### **LA Cell, Inc. Option Grants and Stock Sale**

In January 2016, our subsidiary, LA Cell, Inc. (“LA Cell”) granted an option to purchase 200,000 shares of common stock to David Deming, one of our directors, at an initial exercise price of \$0.20 per share. Additionally, in September 2016, LA Cell granted options to purchase 150,000 and 100,000 shares of common stock to Miranda Toledano, our Executive Vice President of Corporate Development, and Kevin Herde, our Executive Vice President and Chief Financial Officer, respectively, at an initial exercise price of \$0.20 per share. A portion of the shares subject to these stock options typically vest immediately upon grant and the remaining shares vest over two to four years or monthly over four years from the grant date and have a contractual term of ten years.

In addition, in November 2016, LA Cell sold 10,400,000 shares of its common stock for \$2,000,000 to an entity of which Dr. Ji and his wife Vivian Q. Zhang are the sole members and managing directors.

### ***Indemnification Agreements with Directors and Executive Officers***

We have entered into indemnity agreements with certain directors, officers and other key employees of ours under which we agreed to indemnify those individuals under the circumstances and to the extent provided for in the agreements, for expenses, damages, judgments, fines, settlements and any other amounts they may be required to pay in actions, suits or proceedings which they are or may be made a party or threatened to be made a party by reason of their position as a director, officer or other agent of ours, and otherwise to the fullest extent permitted under Delaware law and our Bylaws. We also have an insurance policy covering our directors and executive officers with respect to certain liabilities, including liabilities arising under the Securities Act of 1933, as amended, or otherwise. We believe that these provisions and insurance coverage are necessary to attract and retain qualified directors, officers and other key employees.

### **Board Independence**

Our Board has the responsibility for establishing corporate policies and for our overall performance, although it is not involved in our day-to-day operations. Our Board consults with our counsel to ensure that our Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in the rules of The NASDAQ Stock Market LLC, as in effect from time to time. Consistent with these considerations, after review of all relevant transactions or relationships between each director, or any of his or her family members, us, our senior management and our independent registered public accounting firm, our Board has determined that all of our directors, other than Dr. Ji and Mr. Shah, are independent.

### **Item 14. Principal Accounting Fees and Services.**

#### **Independent Registered Public Accounting Firm's Fees**

The following table represents aggregate fees billed to us for the year ended December 31, 2016 by Deloitte, and for the year ended December 31, 2015 by Mayer Hoffman, in each case, our principal accounting firm for such period. All fees described below were pre-approved by the Audit Committee.

	<b>Year Ended December 31</b>	
	<b>2016</b>	<b>2015</b>
Audit Fees	\$ 660,950(1)	\$ 453,000(2)
Audit-Related Fees	—	—
Tax Fees	289,615(3)	—
All Other Fees	—	—
<b>Total Fees</b>	<b>\$ 950,565</b>	<b>\$ 453,000</b>

- (1) Audit fees consist of fees billed for professional services by Deloitte for audit and quarterly reviews of our financial statements.
- (2) Audit fees consist of fees billed for professional services by Mayer Hoffman for audit and quarterly reviews of our financial statements and review of our registration statement on Form S-3, and related services that are normally provided in connection with statutory and regulatory filings or engagements.
- (3) Tax fees consist of fees billed for tax advisory services by Deloitte after becoming our principal accounting firm in the second half of fiscal year 2016.

#### **Audit Committee's Pre-Approval Policies and Procedures**

The Audit Committee has adopted a policy for the pre-approval of audit and non-audit services rendered by our independent registered public accounting firm. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee's approval of the scope of the engagement of the independent auditors or on an individual explicit case-by-case basis before the independent registered public accounting firm are engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee members, but the decision must be reported to the full Audit Committee at its next scheduled meeting. By the adoption of this policy, the Audit Committee has delegated the authority to pre-approve services to the Chairperson of the Audit Committee, subject to certain limitations.

The Audit Committee has determined that the rendering of services by Deloitte other than audit services is compatible with maintaining the principal accounting firm's independence.

#### **PART IV**

##### **Item 15. Exhibits, Financial Statement Schedules.**

###### (a)(1) Financial Statements

Reference is made to the Index to Consolidated Financial Statements of Sorrento Therapeutics, Inc. appearing on page F-1 of this Form 10-K.

###### (a)(2) Financial Statement Schedules

###### Schedule II – Valuation of Qualifying Accounts

All other schedules not listed above have been omitted because of the absence of conditions under which they are required, or because the required information is included in the consolidated financial statements or the notes thereto.

(a)(3) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
2.1*	Agreement and Plan of Merger between Sorrento Therapeutics, Inc. and IgDraSol, Inc. dated September 9, 2013 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on September 11, 2013).
2.2*	Agreement of Merger by and among Sorrento Therapeutics, Inc., Catalyst Merger Sub, Inc., ConcorTis Biosystems, Corp., Zhenwei Miao and Gang Chen dated as of November 11, 2013 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 14, 2013).
2.3*	Stock Purchase Agreement, dated November 8, 2016, by and among Sorrento Therapeutics, Inc., Scilex Pharmaceuticals Inc., the stockholders of Scilex Pharmaceuticals Inc. party thereto and SPI Shareholders Representative, LLC, as representative of the stockholders of Scilex Pharmaceuticals Inc. party thereto (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 8, 2016).
3.1	Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 15, 2013).
3.2	Certificate of Amendment of the Restated Certificate of Incorporation of Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on August 1, 2013).
3.3	Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the SEC on October 23, 2009).
3.4	Certificate of Designation of Rights, Preferences and Privileges of Series A Junior Participating Preferred Stock of Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 12, 2013).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 23, 2009).
4.2	Form of Convertible Promissory Note (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 21, 2013).
4.3	Amended and Restated Rights Agreement, dated as of December 21, 2015 by and between Sorrento Therapeutics, Inc. and Philadelphia Stock Transfer, Inc., as rights agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on December 21, 2015).
4.4	Common Stock Purchase Warrant issued to Cambridge Equities, LP. (incorporated by reference to Exhibit 4.4 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 16, 2015).
4.5	Securities Purchase Agreement, dated as of April 3, 2016, by and among Sorrento Therapeutics, Inc., ABG SRNE Limited and Ally Bridge LB Healthcare Master Fund Limited (incorporated by reference to Exhibit 4.5 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.6	Securities Purchase Agreement, dated as of April 3, 2016, by and between Sorrento Therapeutics, Inc. and FREJOY Investment Management Co., Ltd. (incorporated by reference to Exhibit 4.6 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.7	Securities Purchase Agreement, dated as of April 3, 2016, by and between Sorrento Therapeutics, Inc. and Beijing Shijilongxin Investment Co., Ltd. (incorporated by reference to Exhibit 4.7 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.8	Securities Purchase Agreement, dated as of April 3, 2016, by and between Sorrento Therapeutics, Inc. and Yuhan Corporation (incorporated by reference to Exhibit 4.8 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.9	Form of Common Stock Purchase Warrant issued to investors pursuant to the Securities Purchase Agreement, dated as of April 3, 2016, by and among Sorrento Therapeutics, Inc., ABG SRNE Limited and Ally Bridge LB Healthcare Master Fund Limited (incorporated by reference to Exhibit 4.9 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).

Exhibit No.	Description
4.10	Form of Common Stock Purchase Warrant issued to investors pursuant to the Securities Purchase Agreement, dated as of April 3, 2016, by and between Sorrento Therapeutics, Inc. and FREJOY Investment Management Co., Ltd. and Securities Purchase Agreement, dated as of April 3, 2016, by and between Sorrento Therapeutics, Inc. and Beijing Shijilongxin Investment Co., Ltd. (incorporated by reference to Exhibit 4.10 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.11	Common Stock Purchase Warrant issued to Yuhan Corporation on April 29, 2016 (incorporated by reference to Exhibit 4.11 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.12	Voting Agreement, dated as of April 29, 2016, by and between Sorrento Therapeutics, Inc. and Yuhan Corporation (incorporated by reference to Exhibit 4.12 to the Registrant's Registration Statement on Form S-3 filed with the SEC on June 29, 2016).
4.13	Registration Rights Agreement, dated November 8, 2016, by and among Sorrento Therapeutics, Inc. and the persons party thereto (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 8, 2016).
4.14	Warrant Agreement, dated November 23, 2016, issued to Hercules Capital, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 29, 2016).
10.1+	Exclusive License and Development Agreement between Sorrento Therapeutics, Inc. and China Oncology Focus Limited dated October 3, 2014 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q/A filed with the SEC on November 25, 2014).
10.2+	License Agreement, dated January 8, 2010, by and between The Scripps Research Institute and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 14, 2010).
10.3±	Form of Stock Option Agreement (incorporated by reference to Exhibit 10.11 to the Registrant's Current Report on Form 8-K/A filed with the SEC on September 22, 2009).
10.4±	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on September 7, 2012).
10.5±	2009 Amended and Restated Stock Incentive Plan, and forms of agreements related thereto (incorporated by reference to Appendix A to the definitive proxy statement filed by Sorrento Therapeutics, Inc. with the Securities and Exchange Commission on May 13, 2016).
10.6±	2009 Equity Incentive Plan, and forms of agreement related thereto (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 25, 2010).
10.7±	Employment Agreement, dated September 21, 2012, by and between Sorrento Therapeutics, Inc. and Henry Ji, Ph.D. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 8, 2012).
10.8±	First Amendment to Employment Agreement dated October 18, 2012, by and between Sorrento Therapeutics, Inc. and Henry Ji, Ph.D. (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 8, 2012).
10.9±	Independent Director Compensation Policy (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 25, 2013).
10.10	Option Agreement between Sorrento Therapeutics, Inc. and B.G. Negev Technologies and Applications Ltd. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 13, 2013).
10.11*	Lease dated as of February 3, 2015 by and between HCP University Center West LLC and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 16, 2015).



Exhibit No.	Description
10.12+	Exclusive License Agreement dated as of April 21, 2015 by and between NantCell, Inc. and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 7, 2015).
10.13*	Stock Sale and Purchase Agreement dated as of May 14, 2015 by and between NantPharma, LLC and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 7, 2015).
10.14*	Membership Interest Purchase Agreement by and among TNK Therapeutics, Inc., CARgenix Holdings LLC, the Members of CARgenix Holdings LLC, Jaymin Patel as the Members Representative and Sorrento Therapeutics, Inc. dated as of August 7, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 16, 2015).
10.15	Amendment No. 1 to Membership Interest Purchase Agreement, dated as of March 7, 2016, by and between TNK Therapeutics, Inc. and Jaymin Patel, as the Members' Representative (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2016).
10.16*	Stock Purchase Agreement by and among TNK Therapeutics, Inc., BDL Products, Inc., the Stockholders of BDL Products, Inc., Richard Junghans, M.D., Ph.D. as the Stockholders' Representative and Sorrento Therapeutics, Inc. dated as of August 7, 2015 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 16, 2015).
10.17	Amendment No. 1 to Stock Purchase Agreement, dated as of March 7, 2016, by and between TNK Therapeutics, Inc. and Richard P. Junghans, M.D., Ph.D., as the Stockholders' Representative (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2016).
10.18	Binding Term Sheet with NanoVelcro Circulating Tumor Cell (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 16, 2015).
10.19+	Exclusive License Agreement dated September 25, 2015 by and between LA Cell, Inc. and City of Hope (incorporated by reference to Exhibit 10.26 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 15, 2016).
10.20±	Employment Agreement, dated December 8, 2014, by and between Sorrento Therapeutics, Inc. and George Ng (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K/A filed with the SEC on April 29, 2016).
10.21±	Employment Agreement, dated October 16, 2015, by and between Sorrento Therapeutics, Inc. and Jeffrey Su (incorporated by reference to Exhibit 10.29 to the Registrant's Annual Report on Form 10-K/A filed with the SEC on April 29, 2016).
10.22±	Employment Agreement between Sorrento Therapeutics, Inc. and Kevin M. Herde dated as of April 5, 2016 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on May 10, 2016).
10.23	Letter Agreement, dated June 30, 2016, among Chan Soon-Shiong Family Foundation, Cambridge Equities, L.P. and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on August 8, 2016).
10.24+	License and Collaboration Agreement, dated July 6, 2016, among Les Laboratoires Servier, SAS, Institut de Recherches Internationales Servier and Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q/A filed with the SEC on January 17, 2017).
10.25	Binding Term Sheet, dated August 15, 2016, among Sorrento Therapeutics, Inc., Scintilla Pharmaceuticals, Inc. and Semnur Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2016).
10.26	Lease Agreement, dated September 12, 2016, between Sorrento Therapeutics, Inc. and HCP Life Science REIT, Inc. (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2016).

Exhibit No.	Description
10.27	Unit Purchase Agreement dated August 5, 2016, by and among MedoveX Corporation and the purchasers party thereto (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by MedoveX Corporation (File No. 001-36763) with the SEC on August 8, 2016).
10.28	Registration Rights Agreement, dated August 5, 2016, by and among MedoveX Corporation and the investors party thereto (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by MedoveX Corporation (File No. 001-36763) with the SEC on August 8, 2016).
10.29	Promissory Note, dated November 1, 2016, issued by Celularity, Inc. to Sorrento Therapeutics, Inc. (incorporated by reference to Exhibit 10.29 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
10.30	Binding Term Sheet, dated November 15, 2016, among Sorrento Therapeutics, Inc., TNK Therapeutics, Inc., and Virttu Biologics Limited (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
10.31**	Loan and Security Agreement, dated November 23, 2016, among Sorrento Therapeutics, Inc., certain of its domestic subsidiaries, and Hercules Capital, Inc.
10.32	First Amendment to Loan and Security Agreement, dated December 27, 2016, among Sorrento Therapeutics, Inc., certain of its domestic subsidiaries, and Hercules Capital, Inc.
10.33	Amendment No. 2 to Stock Purchase Agreement, dated as of September 14, 2016, by and between TNK Therapeutics, Inc. and Richard P. Junghans, M.D., Ph.D., as the Stockholders' Representative (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
10.34**	Second Amendment to Loan and Security Agreement, dated March 2, 2017, among Sorrento Therapeutics, Inc., certain of its domestic subsidiaries, and Hercules Capital, Inc.
10.35	Third Amendment to Loan and Security Agreement, dated March 15, 2017, among Sorrento Therapeutics, Inc., certain of its domestic subsidiaries, and Hercules Capital, Inc.
21.1	List of Subsidiaries (incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
23.1	Consent of Deloitte & Touche LLP (incorporated by reference to Exhibit 23.1 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
23.2	Consent of Mayer Hoffman McCann P.C. (incorporated by reference to Exhibit 23.2 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
23.3	Amended consent of Mayer Hoffman McCann P.C. (incorporated by reference to Exhibit 23.3 to the Registrant's Amendment No. 1 to Annual Report on Form 10-K/A filed with the SEC on March 27, 2017).
24	Power of Attorney (included on signature page hereto) (incorporated by reference to Exhibit 24 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
31.1	Certification of Henry Ji, Ph.D., Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 31.1 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
31.2	Certification of Kevin Herde, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 31.2 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
31.3	Certification of Henry Ji, Ph.D., Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 31.3 to the Registrant's Amendment No. 1 to Annual Report on Form 10-K/A filed with the SEC on March 27, 2017).
31.4	Certification of Kevin Herde, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 31.4 to the Registrant's Amendment No. 1 to Annual Report on Form 10-K/A filed with the SEC on March 27, 2017).

Exhibit No.	Description
31.5	Certification of Henry Ji, Ph.D., Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended.
31.6	Certification of Kevin Herde, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, as amended.
32.1	Certification of Henry Ji, Ph.D., Principal Executive Officer and Kevin Herde, Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 32.1 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
32.2	Certification of Henry Ji, Ph.D., Principal Executive Officer and Kevin Herde, Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as amended (incorporated by reference to Exhibit 32.2 to the Registrant's Amendment No. 1 to Annual Report on Form 10-K/A filed with the SEC on March 27, 2017).
101.INS	XBRL Instance Document (incorporated by reference to Exhibit 101.INS to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
101.SCH	XBRL Taxonomy Extension Schema Document (incorporated by reference to Exhibit 101.SCH to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (incorporated by reference to Exhibit 101.CAL to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document (incorporated by reference to Exhibit 101.DEF to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
101.LAB	XBRL Taxonomy Extension Label Linkbase Document (incorporated by reference to Exhibit 101.LAB to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (incorporated by reference to Exhibit 101.PRE to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2017).

\* Non-material schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Registrant hereby undertakes to furnish supplementally copies of any of the omitted schedules and exhibits upon request by the SEC.

\*\* Portions of this exhibit have been omitted and filed separately with the SEC pursuant to a request for confidential treatment.

+ The SEC has granted confidential treatment with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

± Management contract or compensatory plan.

The following financial statement schedule is filed as part of this Annual Report on Form 10-K:

Schedule Number	Description
II	Valuation and Qualifying Accounts

#### SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

(in thousands)	Balance at Beginning of Period	Reserves Acquired	Additions	Deductions	Balance at End of Period
Fiscal Year 2016:					
Income tax valuation allowance	39,605	—	41,434	—	81,039
	<u>\$ 39,605</u>	<u>\$ —</u>	<u>\$ 41,434</u>	<u>\$ —</u>	<u>\$ 81,039</u>
Fiscal Year 2015:					
Income tax valuation allowance	25,350	—	14,255	—	39,605
	<u>\$ 25,350</u>	<u>\$ —</u>	<u>\$ 14,255</u>	<u>\$ —</u>	<u>\$ 39,605</u>
Fiscal Year 2014:					
Income tax valuation allowance	12,299	—	13,051	—	25,350
	<u>\$ 12,299</u>	<u>\$ —</u>	<u>\$ 13,051</u>	<u>\$ —</u>	<u>\$ 25,350</u>

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 28, 2017

SORRENTO THERAPEUTICS, INC.

By: \_\_\_\_\_ /s/ HENRY J I  
**Director, Chief Executive Officer  
& President**

\*\*\* Text Omitted and Filed Separately  
Confidential Treatment Requested  
Under 17 C.F.R. §§ 200.80(b)(4)  
and 240.24b-2

## **LOAN AND SECURITY AGREEMENT**

THIS **LOAN AND SECURITY AGREEMENT** is made and dated as of November 23, 2016 and is entered into by and among Sorrento Therapeutics, Inc., a Delaware corporation (“Parent”), Concertis Biosystems, Corp., a Delaware corporation, Ark Animal Health, Inc., a Delaware corporation, TNK Therapeutics, Inc., a Delaware corporation, Sorrento Biologics, Inc., a Delaware corporation, Scintilla Pharmaceuticals, Inc., a Delaware corporation, LA Cell, Inc., a Delaware corporation, SiniWest Holding Corp., a Delaware corporation, Levena Biopharma US, Inc., a Delaware corporation, Sorrento BioServices, Inc., a Delaware corporation, Scilex Pharmaceuticals Inc., a Delaware corporation, and each of their Qualified Subsidiaries (together with “Parent”, hereinafter collectively referred to as the “Borrower”), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, referred to as “Lender”) and HERCULES CAPITAL, INC., formerly known as Hercules Technology Growth Capital, Inc., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, the “Agent”).

### **RECITALS**

A. Borrower has requested Lender to make available to Borrower a loan in an aggregate principal amount of Fifty Million Dollars (\$50,000,000) (the “Tranche I Term Loan”);

B. Subject to and conditioned, among other conditions as provided herein, on Borrower’s achievement on or before September 30, 2017 of the Fundraising Milestone and the Corporate Milestone (together, the “Milestones”), Lender will make available to Borrower loans in the principal amount of up to Ten Million Dollars (\$10,000,000) (each a “Tranche II Term Loan” and collectively, “Tranche II Term Loans”, and such amount, the “Maximum Tranche II Term Loan Amount”);

C. Subject to and conditioned, among other conditions as provided herein, on Borrower’s receipt on or before June 30, 2018 of the Committee Approval, Lender may make available to Borrower loans in the principal amount of up to Fifteen Million Dollars (\$15,000,000) (each a “Tranche III Term Loan” and collectively, “Tranche III Term Loans”, and such amount, the “Maximum Tranche III Term Loan Amount”); and

D. Lender (i) is willing to make the Tranche I Term Loan on the terms and conditions set forth in this Agreement; (ii) is willing to make the Tranche II Term Loan subject to and conditioned on Borrower’s achievement, among other conditions as provided herein, of the Milestones; and (iii) is willing to make the Tranche III Term Loan subject to and conditioned, among other conditions as provided herein, on Borrower’s receipt of the Committee Approval.

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## AGREEMENT

NOW, THEREFORE, Borrower, Agent and Lender agree as follows:

### **SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION**

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

“2016 PIPE Notes Receivable” means the Secured Notes (as defined in the Parent’s form 10-Q for the quarterly period ending September 30, 2016).

“2016 Year-End Fundraising Requirement” means Borrower’s receipt after the Closing Date and prior to December 31, 2016, of at least Twenty Two Million Dollars (\$22,000,000) of unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds from (a) one or more Equity Events of (x) Borrower (other than Parent) with investors and with terms and conditions reasonably satisfactory to Agent or (y) Parent, or (b) the collection of no less than 50% of the 2016 PIPE Notes Receivable in cash outstanding as of the Closing Date.

“2017 Q1 Fundraising Requirement” means Borrower’s receipt after the Closing Date and prior to March 31, 2017, of at least Forty Four Million Dollars (\$44,000,000) of unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds (inclusive of any amounts received from the 2016 Year-End Fundraising Requirement) from (a) one or more Equity Events of (x) Borrower (other than Parent) with investors and with terms and conditions reasonably satisfactory to Agent or (y) Parent, or (b) the collection of the 2016 PIPE Notes Receivable in cash outstanding as of the Closing Date.

“Account Control Agreement(s)” means any agreement entered into by and among Agent, Borrower and a third party bank or other institution (including a Securities Intermediary) in which Borrower maintains a Deposit Account or an account holding Investment Property and pursuant to which Agent obtains “control” (as such term is defined in the UCC) over the subject account or accounts.

“ACH Authorization” means the ACH Debit Authorization Agreement in substantially the form of Exhibit H, which account numbers shall be redacted for security purposes if and when filed publicly by Parent.

“Advance” means any Term Loan Advance(s) made pursuant to this Agreement.

“Advance Date” means the funding date of any Advance.

“Advance Request” means a request for an Advance submitted by Parent to Agent in substantially the form of Exhibit A, which request may omit account numbers for security purposes if and when filed publicly by Parent.

“Affiliate” means (a) any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question, (b) any Person directly or indirectly owning, controlling or holding with power to vote fifteen percent (15%) or more of the outstanding voting securities of another Person or (c) any Person fifteen percent (15%) or more of whose outstanding voting securities are directly or indirectly owned, controlled or held by another Person with power to vote such securities. As used in the definition of “Affiliate,” the term “control” 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 ownership of voting securities, by contract or otherwise.

“Agent” has the meaning given to it in the preamble to this Agreement.

“Agreement” means this Loan and Security Agreement, as amended from time to time.

“Amortization Date” means July 1, 2018; provided however, if the Interest Only Extension Conditions are satisfied prior to July 1, 2018, then the Amortization Date shall mean January 1, 2019.

“Assignee” has the meaning given to it in Section 11.13.

“Borrower” has the meaning given to it in the preamble to this Agreement.

“Borrower Products” means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by Borrower or which Borrower intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower since its incorporation.

“Business Day” means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

“Capital Expenditures” means all expenditures (by the expenditure of cash or the incurrence of Indebtedness) during the measuring period of Parent and its consolidated Subsidiaries for any fixed asset or improvements or for replacements, substitutions or additions thereto that have a useful life of more than one year and that are required to be capitalized under GAAP, plus deposits made during the measuring period in connection with fixed assets (less deposits of a prior period included above).

“Cash” means all cash, cash equivalents and liquid funds.

“Celularity” means Celularity, Inc., a Delaware corporation.

“Change in Control” means, with respect to any Person described in the definition of “Change in Control Percentage,” any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the 1934 Act, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the 1934 Act) of more than the applicable Change of Control Percentage of the equity interests of such Person entitled to vote for members of such Person’s Board of Directors on a fully diluted basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right).

“Change in Control Percentage” means:

(a) with respect to any Borrower and any Subsidiary (other than LA Cell), fifty percent (50%),

(b) with respect to LA Cell (i) forty-seven percent 47% (provided that any transaction that would lead to a Change in Control of LA Cell shall be subject to Agent’s consent (not to be unreasonably withheld or delayed) as long as LA Cell remains a co-Borrower under this Agreement) and (ii) the ability, by contract or other voting arrangement, to control the management and operations of LA Cell,

(c) with respect to each of the entities set forth on Schedule 1.1B hereto, the percentage owned on the Closing Date by the applicable Person, and

(d) with respect to any equity interests in other entities held by any Borrower or any Subsidiary at any time after the Closing Date, the applicable percentage so acquired.

“Claims” has the meaning given to it in Section 11.10.

“Closing Date” means the date of this Agreement.

“Closing Facility Charge” means Eight Hundred Ten Thousand Dollars (\$810,000).

“Collateral” means the property described in Section 3.

“Committee Approval” has the meaning given to it in Section 2.2.

“Common Stock” means the Common Stock, \$0.0001 par value per share, of Parent.

“Confidential Information” has the meaning given to it in Section 11.12.

“Contingent Obligation” means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other



agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

"Corporate Milestone" means [...\*\*\*...].

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Domestic Subsidiary" means any Subsidiary that is not a Foreign Subsidiary.

"Due Diligence Fee" means Fifty Five Thousand Dollars (\$55,000), which fee is due to Lender on or prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

"Eligible Foreign Subsidiary" means any Foreign Subsidiary whose execution of a Joinder Agreement would not result in a material adverse tax consequence to Borrower.

"End of Term Amount" means five and one half percent (5.50%) of all Term Loan Advances.

"Equity Event" means, with respect to a Person, any sale or issuance of such Person's securities for financing purposes (whether in a private placement, registered offering or otherwise).

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Event of Default" has the meaning given to it in Section 9.

**\*Confidential Treatment Requested**

“Excluded Accounts” means (a) any Deposit Account of Borrower that is used by such Borrower solely as a payroll account for the employees of Borrower or its Subsidiaries or the funds in such Deposit Account consist solely of funds held by Borrower in trust for any director, officer or employee of Borrower or any employee benefit plan maintained by Borrower or funds representing deferred compensation for the directors and employees of Borrower, collectively not to exceed the amount to be paid in the ordinary course of business in the then-next payroll cycle (b) escrow accounts, Deposit Accounts and trust accounts, in each case holding assets that are pledged or otherwise encumbered pursuant to clauses (vi) or (xv) of Permitted Liens; (c) Deposit Accounts and accounts holding Investment Property held in jurisdictions outside the United States in an aggregate amount not to exceed Fifteen Million Dollars (\$15,000,000) at any time; (d) accounts used to cover import or export duties, value added taxes, duty bonds or similar payments, *provided* the value of such accounts in this subclause (d) shall not exceed Five Hundred Thousand Dollars (\$500,000) in any fiscal year; and (e) until February 23, 2017, those accounts numbered XXXX465849, XXXX465864, XXXX469189 maintained by Scilex Pharmaceuticals Inc. at Wells Fargo Bank in an aggregate amount not to exceed Five Hundred Thousand Dollars (\$500,000) at any time.

“Financial Statements” has the meaning given to it in Section 7.1.

“Foreign Subsidiary” means any Subsidiary other than a Subsidiary organized under the laws of any state or other jurisdiction within the United States of America.

“Fundraising Milestone” means Borrower’s receipt after October 14, 2016 and prior to September 30, 2017, of at least Seventy Five Million Dollars (\$75,000,000) of unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds from one or more Equity Events of Borrower. For the avoidance of doubt, unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds received from the collection of the 2016 PIPE Notes Receivable and, without duplication, any amounts received under the 2016 Year-End Fundraising Requirement and the 2017 Q1 Fundraising Requirement shall be included in the calculation of the Fundraising Milestone.

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

“Indebtedness” means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, and (d) all Contingent Obligations.

“Insolvency Proceeding” means any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other similar relief.

“Intellectual Property” means all of Borrower’s Copyrights, Trademarks, Patents, Licenses, trade secrets and inventions, mask works, Borrower’s applications therefor and reissues, extensions, or renewals thereof; and Borrower’s goodwill associated with any of the foregoing, together with Borrower’s rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

“Interest Only Extension Conditions” shall mean satisfaction of each of the following events: (a) no default or Event of Default shall have occurred; and (b) Borrower shall have drawn the Tranche II Term Loan Advance in its entirety.

“Investment” means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of all, or substantially all, of the assets of another Person.

“Joinder Agreements” means for each Qualified Subsidiary, a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

“Lender” has the meaning given to it in the preamble to this Agreement.

“Liabilities” has the meaning given to it in Section 6.3.

“License” means any Copyright License, Patent License, Trademark License or other license of rights or interests.

“Lien” means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

“Loan” means the Advance(s) made under this Agreement.

“Loan Documents” means this Agreement, the Pledge Agreement, the Notes (if any), the ACH Authorization, the Account Control Agreements, the Joinder Agreements, all UCC Financing Statements, the Warrant and any other documents executed in connection with the Secured Obligations or the transactions contemplated hereby, as the same may from time to time be amended, modified, supplemented or restated.

“Material Adverse Effect” means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Parent and its Subsidiaries taken as a whole; or (ii) the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent’s Liens on the Collateral or the priority of such Liens.

“Maximum Rate” has the meaning given to it in Section 2.3.

“Maximum Term Loan Amount” means Seventy Five Million Dollars (\$75,000,000).

“Maximum Tranche II Term Loan Amount” has the meaning given to it in the Recitals.

“Maximum Tranche III Term Loan Amount” has the meaning given to it in the Recitals.

“Milestones” has the meaning given to it in the Recitals.

“Note” means any Term Note(s).

“Parent” has the meaning given to it in the preamble to this Agreement.

“Patent License” means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement Borrower now holds or hereafter acquires any interest.

“Patents” means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

“Permitted Acquisition” means any acquisition (including by way of merger) by Borrower of all or substantially all of the assets of another Person, or of a division or line of business of another Person, or capital stock of another Person, in each case located entirely within the United States of America, which is conducted in accordance with the following requirements:

- (a) such acquisition is of a business or Person engaged in a line of business related to that of the Borrower or its Subsidiaries;
- (b) if such acquisition is structured as a stock acquisition, then the Person so acquired shall either (i) become a wholly-owned Subsidiary of Borrower or of a Subsidiary and the Borrower shall comply, or cause such Subsidiary to comply, with 7.13 hereof or (ii) such Person shall be merged with and into Borrower (with the Borrower being the surviving entity);
- (c) if such acquisition is structured as the acquisition of assets, such assets shall be acquired by Borrower;
- (d) the Borrower shall have delivered to Lender not less than fifteen (15) nor more than forty five (45) days prior to the date of such acquisition, notice of such acquisition together with pro forma projected financial information, copies of all material documents relating to such acquisition, and historical financial statements for such acquired entity, division or line of business, in each case in form and substance satisfactory to Lender and demonstrating compliance with the covenants set forth in Section 7 hereof on a pro forma basis as if the acquisition occurred on the first day of the most recent measurement period;

(e) both immediately before and after such acquisition no default or Event of Default shall have occurred and be continuing;

(f) if such acquisition occurs from the Closing Date through December 31, 2016, the terms of such acquisition (including pricing) match the terms set forth in the applicable term sheets listed in Schedule 1D; provided that the aggregate consideration paid with respect to the acquisition of Bioserv Corporation shall not exceed Four Million Dollars (\$4,000,000); and

(g) the sum of the purchase price of such proposed new acquisition, computed on the basis of total acquisition consideration paid or incurred, or to be paid or incurred, by Borrower with respect thereto, including the amount of Permitted Indebtedness assumed or to which such assets, businesses or business or ownership interest or shares, or any Person so acquired, is subject, shall not be greater than (i) with respect to any acquisition occurring from the Closing Date through December 31, 2016, the amount set forth in the applicable term sheet listed in Schedule 1D for any single acquisition or group of related acquisitions or (ii) on and after January 1, 2017, \$10,000,000 in the aggregate for all acquisitions during any fiscal year.

“Permitted Indebtedness” means: (i) Indebtedness of Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document; (ii) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A; (iii) Indebtedness of up to One Million Dollars (\$1,000,000) in the aggregate outstanding at any time secured by a Lien described in clause (viii) of the defined term “Permitted Liens,” provided such Indebtedness does not exceed the cost of the Equipment financed with such Indebtedness; (iv) Indebtedness to trade creditors incurred in the ordinary course of business, including Indebtedness incurred in the ordinary course of business with corporate credit cards; (v) Indebtedness that also constitutes a Permitted Investment; (vi) Subordinated Indebtedness; (vii) reimbursement obligations in connection with letters of credit and cash management services (including credit cards, debit cards and other similar instruments) that are secured by Cash and issued on behalf of Borrower or a Subsidiary thereof in an amount not to exceed Two Million Dollars (\$2,000,000) in the aggregate at any time outstanding; (viii) other Indebtedness in an amount not to exceed One Million Dollars (\$1,000,000) at any time outstanding; (ix) intercompany Indebtedness that constitutes a Permitted Investment; (x) up to One Million Dollars (\$1,000,000) in the aggregate in repayment obligations of Borrower under any foreign exchange contract, currency swap agreement, interest rate swap, cap or collar agreement or other similar agreement or arrangement designed to alter the risks to Borrower arising from fluctuations in currency values or interest rates entered into in the ordinary course of business and not for speculative purposes; (xi) Indebtedness secured by a Lien described in clause (xii) of the defined term Permitted Liens; (xii) Indebtedness consisting solely of fees, royalties, advances for research and development activities, and other amounts paid by third parties to Borrower, in each case in the ordinary course of Borrower’s business and which, by the express terms of the applicable agreement, license, contract or other instrument to which they relate, are payable in advance, and with respect to the payment of which Borrower may have contingent liabilities; (xiii) Indebtedness consisting solely of pre-paid fees, royalties, advances for research and development activities, and other amounts payable by or obligations of Borrower to third parties, in each case in the ordinary course of Borrower’s business, under in-bound and out-bound licenses of Intellectual Property used to improve Borrower’s product portfolio and competitive position; (xiv) (a) guarantees of a Borrower of Indebtedness of another Borrower not to exceed the principal amount of such Indebtedness, (b) unsecured guarantees by

a Borrower of Indebtedness of a Subsidiary that is not a Borrower; provided that the aggregate outstanding principal amount of such Indebtedness does not exceed One Million Dollars (\$1,000,000), and (c) guarantees by a Subsidiary that is not a Borrower of Indebtedness of any other Subsidiary that is not a Borrower; and (xv) extensions, refinancings and renewals of any items of Permitted Indebtedness, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon Borrower or its Subsidiary, as the case may be.

“Permitted Investment” means: (i) Investments existing on the Closing Date which are disclosed in Schedule 1B; (ii) (a) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof, (b) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor’s Corporation or Moody’s Investors Service, (c) certificates of deposit issued by any bank with assets of at least Five Hundred Million Dollars (\$500,000,000) maturing no more than one year from the date of investment therein, and (d) money market accounts; (iii) repurchases of stock from former employees, directors, or consultants of Borrower under the terms of applicable repurchase agreements at the original issuance price of such securities in an aggregate amount not to exceed One Million Dollars (\$1,000,000) in any fiscal year, provided that no Event of Default has occurred, is continuing or could exist after giving effect to the repurchases; (iv) Investments accepted in connection with Permitted Transfers; (v) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower’s business; (vi) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business, provided that this subparagraph (vi) shall not apply to Investments of Borrower in any Subsidiary; (vii) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds to employees, officers or directors relating to the purchase of capital stock of Borrower pursuant to employee stock purchase plans or other similar agreements approved by Borrower’s Board of Directors; (viii) Investments consisting of travel advances and relocation loans in the ordinary course of business; (ix) Investments in newly-formed or acquired Domestic Subsidiaries, provided that each such Domestic Subsidiary enters into a Joinder Agreement after its formation or acquisition by Borrower and executes such other documents as shall be reasonably requested by Agent in connection with the same; (x) Investments in Foreign Subsidiaries approved in advance in writing by Agent; (xi) joint ventures or strategic alliances in the ordinary course of Borrower’s business consisting of the nonexclusive licensing of technology (provided that such licenses may be exclusive in respects other than territory and may be exclusive as to territory only as to discreet geographical areas outside the United States and may have such other exclusivity terms as consented to in writing by Agent, which consent shall not be unreasonably withheld), the development of technology or the providing of technical support, provided that any Investments by Borrower do not exceed One Million Dollars (\$1,000,000) in the aggregate in any fiscal year; (xii) Investments consisting of accounts receivable, endorsements for collection, deposits or similar Investments arising in the ordinary course of business; (xiii) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; (xiv) such other Investments as are described in Borrower’s Board of Directors’ approved investment policy guidelines as approved by Agent in writing, which such Agent approval shall not be unreasonably withheld or delayed; (xv) Investments consisting of Permitted Acquisitions; (xvi) Investments in Celularity pursuant to the terms as set forth in that certain Non-Binding Term Sheet dated as of October 31, 2016 and delivered to Agent on November 1, 2016 and not to exceed Five Million Dollars (\$5,000,000) for fiscal year 2016 and Twelve Million Five Hundred Thousand Dollars (\$12,500,000) in the aggregate; (xvii) (a) Investments by a Borrower in another Borrower, (b) Investments by a Subsidiary that is not a Borrower in a Borrower or a Subsidiary that is not a Borrower; and (c) Investments by a Borrower in a Subsidiary that is not a Borrower not to exceed One Million Dollars (\$1,000,000) in the aggregate; (xviii) Investments of a Person existing at the time such Person becomes a Subsidiary of Borrower or merges with Borrower or any Subsidiary so long as such Investments were not made in contemplation of such Person becoming a Subsidiary or such merger, not to exceed One Million Dollars (\$1,000,000) in the aggregate; and (xix) additional Investments that do not exceed One Million Dollars (\$1,000,000) in the aggregate.

“Permitted Liens” means any and all of the following: (i) Liens in favor of Agent or Lender; (ii) Liens existing on the Closing Date which are disclosed in Schedule 1C; (iii) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings; provided, that Borrower maintains adequate reserves therefor in accordance with GAAP (to the extent required thereby); (iv) Liens securing claims or demands of materialmen, artisans, mechanics, carriers, warehousemen, landlords and other like Persons arising in the ordinary course of Borrower’s business and imposed without action of such parties; provided, that the payment thereof is not yet required; (v) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder; (vi) deposits to secure the performance of obligations (including by way deposits to secure letters of credit issued to secure the same) under commercial supply and/or manufacturing agreements, in an aggregate amount not to exceed Five Hundred Thousand Dollars (\$500,000) at any time, (vii) the following deposits, to the extent made in the ordinary course of business: deposits under worker’s compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds; (viii) Liens on Equipment or software or other intellectual property constituting purchase money Liens and Liens in connection with capital leases securing Indebtedness permitted in clause (iii) of the definition of “Permitted Indebtedness”; (ix) Liens incurred in connection with Subordinated Indebtedness; (x) leasehold interests in leases or subleases and licenses and sublicenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor; (xi) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due; (xii) Liens securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to the insurance policies and all money due Borrower thereunder (including the return of premiums and dividends) and not to any other property or assets) and incurred in the ordinary course of business; (xiii) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms; (xiv) easements, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property; (xv) (A) Liens on Cash securing obligations permitted under clause (vii) of the definition of Permitted Indebtedness and (B) security deposits in connection with real property leases in an aggregate amount not to exceed One Million Dollars (\$1,000,000) at any time; (xvi) Liens of landlords (A) arising by statute or (B) under any lease entered into in the ordinary course of business, in each case solely with respect to fixtures and movable tangible property located on the real property leased or subleased from such landlord and securing amounts that are not yet due or that are being contested in good faith by appropriate proceedings, provided that the Borrower maintains adequate reserves therefor in accordance with GAAP, and which are subordinated to the security interests of the Agent granted under this Agreement and pursuant to a landlord waiver (or, with respect to clause (A) only, under any lease for which no landlord waiver is required hereunder); (xvii) sales, transfers, licenses, sublicenses, leases, subleases or other dispositions of assets permitted by Section 7.8 and, in connection therewith, customary rights and restrictions contained in agreements relating to such transactions pending the completion thereof or during the term thereof, and any option or other agreement to sell, transfer, license, sublicense, lease, sublease or dispose of an asset permitted by Section 7.8 and (xviii) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xii) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase.

“Permitted Transfers” means (i) sales, transfers or other dispositions of Inventory in the ordinary course of business (which, for the avoidance of doubt, shall not include any transfers or other dispositions of or from Borrower’s proprietary G-MAB library platform or any other Intellectual Property), (ii) the licenses listed on Schedule 7.8, (iii) (a) non-exclusive licenses, sublicenses and similar arrangements for the use of Intellectual Property and related assets in the ordinary course of business and other licenses and sublicenses that could not result in a legal transfer of title of the licensed property but that may be exclusive in respects other than territory and that may be exclusive to territory only as to discreet geographical areas outside of the united States of America in the ordinary course of business and (b) exclusive licenses existing on the Closing Date and set forth in Schedule 1E, (iv) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business; (v) transfers expressly permitted under Sections 7.5, 7.6 and 7.7; (vi) transfers by and among the Borrower and any other Borrower or a guarantor; (vii) transfers by any Subsidiary to a Borrower or a guarantor, or if such Subsidiary is not a Borrower or a guarantor, to another Subsidiary that is not a Borrower or a guarantor; (viii) other transfers of assets (other than Intellectual Property) having a fair market value of not more One Million Dollars (\$1,000,000) in the aggregate in any fiscal year; and (viii) for the avoidance of doubt, sales by Borrower of its equity securities in an Equity Event of Borrower.

“Person” means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.



“Pledge Agreement” means the Pledge Agreement dated as of the Closing Date between Borrower and Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Preferred Stock” means at any given time any equity security issued by Parent that has any rights, preferences or privileges senior to Parent’s Common Stock.

“Prepayment Charge” has the meaning given to it in Section 2.5.

“Publicity Materials” has the meaning given to it in Section 11.18.

“Qualified Subsidiary” means any direct or indirect Domestic Subsidiary or Eligible Foreign Subsidiary, except for Concoctis, Inc., a Delaware corporation, CARgenix Holdings, LLC, a Rhode Island limited liability company, and BDL Products, Inc., a Delaware corporation.

“Receivables” means (i) all of Borrower’s Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

“Required Lenders” means at any time, the holders of more than fifty percent (50%) of the sum of the aggregate unpaid principal amount of the Term Loan then outstanding.

“Rights to Payment” has the meaning given to it in Section 3.1.

“Roger Williams Litigation” means Immunomedics, Inc. v. Roger Williams Medical Center et al., Civil Action No. 2:15-cv-04526-JLL-SCM (D.N.J.), filed on September 26, 2016.

“SEC” means the Securities and Exchange Commission.

“Secured Obligations” means Borrower’s obligations under this Agreement and any Loan Document (other than the Warrant), including any obligation to pay any amount now owing or later arising.

“Subordinated Indebtedness” means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its sole discretion.

“Subsequent Financing” means the closing of any Equity Event of Borrower, any Subsidiary or any Affiliate of Borrower after the Closing Date which results in aggregate proceeds to such Person of at least Ten Million Dollars (\$10,000,000).

“Subsidiary” means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which Borrower owns or controls 50% or more of the outstanding voting securities, including each entity listed on Schedule 1 hereto.

“Term Commitment” means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to the Borrower in a principal amount not to exceed the amount set forth under the heading “Term Commitment” opposite such Lender’s name on Schedule 1.1A.

“Term Loan” means the Tranche I Term Loan and, as applicable, the Tranche II Term Loan and the Tranche III Term Loan.

“Term Loan Advance” means any Term Loan funds advanced under this Agreement.

“Term Loan Interest Rate” means for any day a per annum rate of interest equal to the greater of either (i) 9.25% *plus* the prime rate as reported in The Wall Street Journal *minus* 3.50% and (ii) 9.25%.

“Term Loan Maturity Date” means December 1, 2020.

“Term Note” means a Promissory Note in substantially the form of Exhibit B.

“Trademark License” means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“Trademarks” means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

“Tranche I Term Loan” has the meaning given to it in the Recitals.

“Tranche I Term Loan Advance” has the meaning given to it in Section 2.2(a).

“Tranche II Term Loan(s)” has the meaning given to it in the Recitals.

“Tranche II Term Loan Advance” has the meaning given to it in Section 2.2(a).

“Tranche II Term Loan Advance Period” means the period commencing on the date that Borrower has achieved all Milestones in accordance with the definition thereof, through and including September 30, 2017.

“Tranche III Facility Charge” means an amount equal to one percent (1.00%) of the Tranche III Term Loans advanced under this Agreement.

“Tranche III Term Loan(s)” has the meaning given to it in the Recitals.

“Tranche III Term Loan Advance” has the meaning given to it in Section 2.2(a).

“Tranche III Term Loan Advance Period” means the period commencing on the date that Borrower has received the Committee Approval in accordance with the definition thereof, through and including June 30, 2018.

“Unrestricted Cash” means Cash held by Borrower in account(s) located in the United States of America subject to an Account Control Agreement in favor of Agent.

“UCC” means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent’s Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term “UCC” shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

“Wildcat Litigation” means, individually and collectively, (i) Wildcat Liquid Alpha, LLC v. Sorrento Therapeutics, Inc., C.A. No. 12254-VCMR (Del. Ch.), filed on April 25, 2016; and (ii) Wildcat Liquid Alpha LLC v. Henry Ji, William S. Marth, Kim D. Janda, Douglas Ebersole, Jaisim Shah, David H. Deming, and Sorrento Therapeutics, Inc., C.A. No. 12338-VCMR (Del. Ch.), filed on May 13, 2016.

“Warrant” means any warrant entered into in connection with the Loan, as may be amended, restated or modified from time to time.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a “Section,” “subsection,” “Exhibit,” “Annex,” or “Schedule” shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC.

**SECTION 2. THE LOAN**

2.1 [RESERVED]

2.2 Term Loan.

(a) Tranche I Term Loan; Tranche II Term Loans; Tranche III Term Loans.

(i) *Tranche I Term Loan*. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, and Borrower agrees to draw, a Term Loan Advance of Fifty Million Dollars (\$50,000,000) on the Closing Date (the “Tranche I Term Loan Advance”).

(ii) *Tranche II Term Loan*. Subject to the terms and conditions of this Agreement and conditioned on Borrower’s achievement of the Milestones in accordance with the definition thereof, during the Tranche II Term Loan Advance Period, at Borrower’s request, Lender will severally (and not jointly), subject to all of the conditions required hereunder, make in an amount not to exceed its respective Term Loan Commitment, Tranche II Term Loans in a principal amount up to Ten Million Dollars (\$10,000,000) (the “Tranche II Term Loan Advance”). The aggregate outstanding Tranche II Term Loan Advance shall not exceed the Maximum Tranche II Term Loan Amount.

(iii) *Tranche III Term Loan*. Subject to the terms and conditions of this Agreement and conditioned on approval by Lender's investment committee in its sole and unfettered discretion (the "Committee Approval"), during the Tranche III Term Loan Advance Period, at Borrower's request, Lender may severally (and not jointly), subject to all of the conditions required hereunder, make in an amount not to exceed its respective Term Loan Commitment, Tranche III Term Loans in an amount up to Fifteen Million Dollars (\$15,000,000) (the "Tranche III Term Loan Advance"). The aggregate outstanding Tranche III Term Loan Advance shall not exceed the Maximum Tranche III Term Loan Amount.

(iv) In each case, Term Loan Advances must be in minimum increments of Five Million Dollars (\$5,000,000). The aggregate outstanding Term Loan Advances shall not exceed the Maximum Term Loan Amount.

(b) *Advance Request*. To obtain a Term Loan Advance, Borrower shall complete, sign and deliver an Advance Request (at least three (3) Business Days before an Advance Date other than the Closing Date, which shall be at least one (1) Business Day) to Agent. Lender shall fund each Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the requested Advance Date.

(c) *Interest*. The outstanding principal balance of each Term Loan Advance shall bear interest thereon from the applicable Advance Date at the Term Loan Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Interest Rate will float and change on the day the prime rate changes from time to time.

(d) *Payment*. Borrower will pay interest on the outstanding principal amount of each Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date. Borrower shall repay the aggregate Term Loan principal balance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations and any other obligations which, by their specific terms, are to survive the termination of this Agreement) are repaid, with the payments for such schedule based on their being completed on the Term Loan Maturity Date. The entire Term Loan principal balance and all accrued but unpaid interest hereunder, shall be due and payable on Term Loan Maturity Date. Borrower shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to Borrower's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender under each Term Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement.

2.3 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrower has actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrower shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrower.

2.4 Default Interest. In the event any payment is not paid on the scheduled payment date, an amount equal to five percent (5.00%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.2(c), plus five percent (5.00%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.2(c) or Section 2.4, as applicable.

2.5 Prepayment. At its option upon at least seven (7) Business Days prior notice to Agent, Borrower may prepay all or part of the outstanding Advances by paying all or part of the principal balance and all or part of the accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the Advance amount being prepaid: if such Advance amounts are prepaid in any of the first twelve (12) months following the Closing Date, 3.00%; after twelve (12) months but prior to twenty four (24) months, 1.50%; and thereafter, 0.50% (each, a "Prepayment Charge"). Borrower agrees that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advances. Borrower shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge if Agent and Lender (in their sole and absolute discretion) agree in writing to refinance the Advances prior to the Term Loan Maturity Date. Any prepayment (other than a prepayment of all of the outstanding Advances) must be in a minimum amount of Five Million Dollars (\$5,000,000).

2.6 End of Term Charge. On the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their specific terms, are to survive the termination of this Agreement) in full, or (iii) the date that the Secured Obligations become due and payable, Borrower shall pay Lender the End of Term Amount. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

2.7 Notes. If so requested by Lender by written notice to Borrower, then Borrower shall execute and deliver to Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of Lender pursuant to Section 11.13) promptly after Borrower's receipt of such notice a Note or Notes to evidence Lender's Loans.

2.8 Pro Rata Treatment. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan shall be made pro rata according to the Term Commitments of the relevant Lender.

2.9 If Borrower has not received after the Closing Date and prior to December 31, 2016, at least Forty Three Million Two Hundred Fifty Thousand Dollars (\$43,250,000) of unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds from (a) one or more Equity Events of (x) Borrower with investors and with terms and conditions reasonably satisfactory to Agent or (y) Parent, or (b) the collection of the 2016 PIPE Notes Receivable outstanding as of the Closing Date, Borrower shall pay Agent for the benefit of the Lenders a fee equal to Two Hundred Ten Thousand Dollars (\$210,000), which fee shall be due and payable on December 31, 2016 and deemed fully earned as of the date hereof.

### **SECTION 3. SECURITY INTEREST**

3.1 As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in and to the following personal property whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles (which, for the avoidance of doubt, shall exclude Intellectual Property pursuant to Section 3.2); (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrower's property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing; provided, however, that the Collateral shall include all Accounts and General Intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of the date of this Agreement, include the Intellectual Property to the extent necessary to permit perfection of Agent's security interest in the Rights to Payment.

3.2 Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include: (a) more than 65% of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by Borrower of any Foreign Subsidiary (other than an Eligible Foreign Subsidiary) which shares entitle the holder thereof to vote for directors or any other matter; (b) any property, right or asset held by Borrower or any Subsidiary to the extent that a grant of a security interest therein is prohibited by applicable law or constitutes a breach or default under or results in the termination of or requires any consent not obtained under, any contract, license, agreement, instrument or other document evidencing or giving rise to such property, except (A) to the extent that the terms in such contract, license, instrument or other document providing for such prohibition, breach, default or termination, or requiring such consent are not permitted under this Agreement, (B) to the extent that such applicable law or the term in such contract, license, agreement, instrument or other document providing for such prohibition, breach, default or termination or requiring such consent is ineffective under Section 9406, 9407, 9408 or 9409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other applicable law (including the United States Bankruptcy Code) or principles of equity; provided, however, that such security interest shall attach immediately at such time as such applicable law is no longer effective or applicable, or such prohibition, breach, default or termination is no longer applicable or is waived, and to the extent severable, shall attach immediately to any portion of the Collateral that does not result in such consequences or (C) any equity interest required to be pledged under any Loan Document; (c) Cash securing obligations permitted under clause (vii) of the definition of Permitted Indebtedness; (d) Excluded Accounts; (e) any Intellectual Property, whether now owned or hereafter acquired (other than any Rights to Payment in respect thereof), in each case only to the extent and for so long as the prohibition on such Lien or pledge is in effect under the document(s) governing such prohibition, if applicable and (f) subject to Section 5.(h)(ii) of the Pledge Agreement, the LLC Units (as defined in the Pledge Agreement).

3.3 The lien and security interest created hereunder shall be promptly released (a) with respect to all Collateral upon the payment in full of all Secured Obligations in accordance with this Agreement (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement), (b) with respect to Collateral that is sold or to be sold as part of or in connection with any Permitted Transfer to a Person who is not a Borrower, or (c) if otherwise approved, authorized or ratified in writing by Agent in accordance with this Agreement. Upon such release, Agent shall, upon the reasonable request and at the sole cost and expense of Borrower, assign, transfer and deliver to Borrower, against receipt and without recourse to or warranty by Agent, except as to the fact that Agent has not encumbered the released assets, such of the Collateral or any part thereof to be released as is in possession of Agent and as shall not have been sold or otherwise applied pursuant to the terms hereof and customary documents and instruments (including UCC-3 termination financing statements or releases) acknowledging the release of such Collateral.

#### **SECTION 4. CONDITIONS PRECEDENT TO LOAN**

The obligations of Lender to make the Loan hereunder are subject to the satisfaction by Borrower of the following conditions:

4.1 Initial Tranche I Term Loan Advance. On or prior to the Closing Date, Borrower shall have delivered to Agent the following:

(a) executed copies of the Loan Documents (other than the Warrant, which shall be an original), Account Control Agreements, a legal opinion of Borrower's counsel, and all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral, in all cases in form and substance reasonably acceptable to Agent;

- (b) certified copy of resolutions of Borrower's board of directors evidencing approval of (i) the Loan and other transactions evidenced by the Loan Documents; and (ii) the Warrant and transactions evidenced thereby;
- (c) certified copies of the Certificate of Incorporation and the Bylaws, as amended through the Closing Date, of Borrower;
- (d) a certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified could have a Material Adverse Effect;
- (e) payment of the Due Diligence Fee (to the extent not already paid), the Closing Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance (Agent and Lenders acknowledge that, prior to the date hereof, they have received the Due Diligence Fee to be applied in its entirety toward the payment of any non-legal transaction costs and non-legal due diligence expenses incurred by Agent and Lenders through the Closing Date);
- (f) an assignment form executed in blank with respect to that certain Common Stock Purchase Warrant issued August 5, 2016 by Medovex Corporation in favor of Sorrento Therapeutics (as amended, supplemented or modified) and in the form of Exhibit B to such warrant; and
- (g) such other documents as Agent may reasonably request.

4.2 All Advances. On each Advance Date:

- (a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.2(b), duly executed by Borrower's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.
- (b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.
- (c) Borrower shall be in compliance with all the terms and provisions set forth herein and in each other Loan Document on its part to be observed or performed, and at the time of and immediately after such Advance no Event of Default shall have occurred and be continuing. For the avoidance of doubt, Borrower shall have paid the fee set forth in Section 2.9 if and as required.



(d) With respect to any Tranche III Term Loan Advance, Borrower shall have paid to Lender the Tranche III Facility Charge, which amount may be deducted from such Tranche III Term Loan Advance.

(e) Each Advance Request shall be deemed to constitute a representation and warranty by Borrower on the relevant Advance Date as to the matters specified in paragraphs (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 [RESERVED]

4.4 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

## **SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWER**

Borrower represents and warrants that:

5.1 Corporate Status. Borrower is duly organized, legally existing and in good standing under the laws of its jurisdiction of incorporation or formation, and is duly qualified as a foreign corporation in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, as may be updated by Borrower in a written notice (including any Compliance Certificate) provided to Agent after the Closing Date.

5.2 Collateral. Borrower owns the Collateral and the Intellectual Property, free of all Liens, except for Permitted Liens. Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Borrower's execution, delivery and performance of this Agreement and all other Loan Documents, and Borrower's execution of the Warrant, (i) have been duly authorized by all necessary corporate action of Borrower, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and the other Loan Documents, (iii) do not violate any provisions of Borrower's Certificate or Articles of Incorporation (as applicable), bylaws, or any, law, regulation, order, injunction, judgment, decree or writ to which Borrower is subject and (iv) except as described on Schedule 5.3, do not violate any material contract or material agreement or require the consent or approval of any other Person which has not already been obtained. The individual or individuals executing the Loan Documents and the Warrant are duly authorized to do so.

5.4 Material Adverse Effect. No event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. Borrower is not aware of any event likely to occur that is reasonably expected to result in a Material Adverse Effect.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of Borrower, threatened against or affecting Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws. Borrower is not in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. Borrower is not in default in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound. Borrower, its Affiliates and, to the knowledge of Borrower and its Affiliates, any agent or other party acting on behalf of Borrower or its Affiliates are in compliance with all applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations, and none of the funds to be provided under this Agreement will be used, directly or indirectly, for any activities in violation of such laws and regulations.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrower to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrower, and (ii) the most current of such projections provided to Borrower's Board of Directors (it being understood that such projections are subject to significant uncertainties and contingencies, many of which are beyond the control of Borrower, that no assurance is given that any particular projections will be realized, and that actual results may differ).

5.8 Tax Matters. Except as described on Schedule 5.8 and except those being contested in good faith with adequate reserves under GAAP, (a) Borrower has filed all material federal, state and local tax returns that it is required to file, (b) Borrower has duly paid or fully reserved for all material taxes or installments thereof (including any interest or penalties) as and when due, which have or may become due pursuant to such returns, and (c) Borrower has paid or fully reserved for any material tax assessment received by Borrower for the three (3) years preceding the Closing Date, if any (including any taxes being contested in good faith and by appropriate proceedings).

5.9 Intellectual Property Claims. Borrower is the sole owner of, or otherwise has the right to use, the Intellectual Property material to Borrower's business. Except as described on Schedule 5.9, to the best of Borrower's knowledge, (i) each of the material Copyrights, Trademarks and Patents is valid and enforceable, (ii) no material part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and (iii) no claim has been made to Borrower that any material part of the Intellectual Property violates the rights of any third party. Exhibit D is a true, correct and complete list of each of Borrower's Patents, registered Trademarks, registered Copyrights, and material agreements under which Borrower licenses Intellectual Property from third parties (other than shrink-wrap software licenses), together with application or registration numbers, as applicable, owned by Borrower or any Subsidiary, in each case as of the Closing Date. Borrower is not in material breach of, nor has Borrower failed to perform any material obligations under, any of the foregoing contracts, licenses or agreements and, to Borrower's knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Intellectual Property. Except as described on Schedule 5.10, Borrower has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower. Without limiting the generality of the foregoing, and in the case of Licenses, except for restrictions that are unenforceable under Division 9 of the UCC, Borrower has the right, to the extent required to operate Borrower's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, except for Intellectual Property subject to Licenses to the extent such Licenses constitute Permitted Transfers of the type described in clause (iii) of the definition thereof and Borrower owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to Borrower's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Borrower Products except customary covenants in inbound license agreements and equipment leases where Borrower is the licensee or lessee.

5.11 Borrower Products. Except as described on Schedule 5.11, no material Intellectual Property owned by Borrower or Borrower Product has been or is subject to any actual or, to the knowledge of Borrower, threatened in writing litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner Borrower's use, transfer or licensing thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates Borrower to grant licenses or ownership interest in any future Intellectual Property related to the operation or conduct of the business of Borrower or Borrower Products. Borrower has not received any written notice or claim, or, to the knowledge of Borrower, oral notice or claim, challenging or questioning Borrower's ownership in any material Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to Borrower's knowledge, is there a reasonable basis for any such claim. Neither Borrower's use of its Intellectual Property nor the production and sale of Borrower Products infringes the Intellectual Property or other rights of others in any material respect.

5.12 Financial Accounts. Exhibit E, as may be updated by Borrower in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which Borrower or any Subsidiary maintains Deposit Accounts and (b) all institutions at which Borrower or any Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name, address and telephone number of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Except for Permitted Investments of the type described in clauses (i), (vii) or (viii) of the definition thereof, Borrower has no outstanding loans to any employee, officer or director of Borrower nor has Borrower guaranteed the payment of any loan made to an employee, officer or director of Borrower by a third party.

5.14 Capitalization and Subsidiaries. Each privately-held Borrower's capitalization as of the Closing Date is set forth on Schedule 5.14 annexed hereto. Borrower does not own any stock, partnership interest or other securities of any Person, except for Permitted Investments. Attached as Schedule 5.14, as may be updated by Borrower in a written notice provided after the Closing Date, is a true, correct and complete list of each Subsidiary.

5.15 Foreign Subsidiary Voting Rights. No decision or action in any governing document of any Foreign Subsidiary (other than an Eligible Foreign Subsidiary) requires a vote of greater than 50.1% of the equity interests or voting rights of such Foreign Subsidiary.

## **SECTION 6. INSURANCE; INDEMNIFICATION**

6.1 Coverage. Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrower's line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrower must maintain a minimum of Two Million Dollars (\$2,000,000) of commercial general liability insurance for each occurrence. Borrower has and agrees to maintain a minimum of Two Million Dollars (\$2,000,000) of directors' and officers' insurance for each occurrence and Five Million Dollars (\$5,000,000) in the aggregate. So long as there are any Secured Obligations outstanding (other than inchoate indemnity obligations and any other obligations which, by their specific terms, are to survive the termination of this Agreement), Borrower shall also cause to be carried and maintained insurance upon the Collateral, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles. Borrower shall deliver to Agent copies of all insurance policy binders with respect to the insurance policies required under this Section 6.

6.2 Certificates. Borrower shall deliver to Agent certificates of insurance that evidence Borrower's compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrower's insurance certificate shall state Agent (shown as "Hercules Capital, Inc.", as Agent") is an additional insured for commercial general liability, a loss payee for all risk property damage insurance, subject to the insurer's approval, and a loss payee for property insurance and additional insured for liability insurance for any future insurance that Borrower may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient). Borrower shall promptly notify Agent of any other policy changes materially adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved.

6.3 Indemnity. Borrower agrees to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an “Indemnified Person”) harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable attorneys’ fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, “Liabilities”), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting from any Indemnified Person’s gross negligence or willful misconduct. Borrower agrees to pay, and to save Agent and Lender harmless from, any and all liabilities with respect to, or resulting solely from any delay in paying, any and all excise, sales or other similar taxes (excluding taxes imposed on or measured by the net income of Agent or Lender) that may be payable or determined to be payable with respect to any of the Collateral or this Agreement. In no event shall Borrower or any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, this Agreement.

## **SECTION 7. COVENANTS OF BORROWER**

Each Borrower agrees as follows:

7.1 Financial Reports. Borrower shall furnish to Agent the financial statements and reports listed hereinafter (the “Financial Statements”):

(a) as soon as practicable (and in any event within 45 days) after the end of each month, (i) if Parent’s market capitalization is at least Three Hundred Million Dollars (\$300,000,000), an unaudited interim and year-to-date balance sheet as of the end of such month (prepared on a consolidating basis) or (ii) if Parent’s market capitalization is less than Three Hundred Million Dollars (\$300,000,000), unaudited interim and year-to-date financial statements as of the end of such month (prepared on a consolidated basis), including balance sheet and related statements of income and cash flows, in each case in the form reviewed by management, accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, all certified by Borrower’s Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, except (i) for the absence of footnotes, (ii) that they are subject to normal year-end adjustments, and (iii) they do not contain certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) within forty five (45) days after the end of each of the first three (3) calendar quarters in each fiscal year, unaudited interim and year-to-date financial statements as of the end of such calendar quarter (prepared on a consolidated and consolidating basis), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that would reasonably be expected to have a Material Adverse Effect, certified by Borrower's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, except (i) for the absence of footnotes, and (ii) that they are subject to normal year-end adjustments to the extent required by Form 10-Q; as well as the most recent capitalization table for Borrower, including the weighted average exercise price of employee stock options;

(c) within ninety (90) days after the end of each fiscal year, unqualified audited financial statements as of the end of such year (prepared on a consolidated basis), including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrower and reasonably acceptable to Agent, accompanied by any management report from such accountants;

(d) within forty five (45) days after the end of each month, a Compliance Certificate in the form of Exhibit F;

(e) promptly after the sending or filing thereof, as the case may be, copies of any proxy statements, financial statements or reports that Parent has made available to holders of its Preferred Stock and copies of any regular, periodic and special reports or registration statements that Borrower files with the SEC or any governmental authority that may be substituted therefor, or any national securities exchange;

(f) promptly following each meeting of Borrower's Board of Directors, copies of all presentation materials that Borrower provides to its directors in connection with meetings of the Board of Directors shall be made available for inspection by Agent at Borrower's premises at reasonable times and upon reasonable notice, provided that in all cases Borrower may exclude any information or materials related to executive compensation, executive sessions, debt refinancings, confidential information, any attorney-client privileged information and any information that would raise a conflict of interest with Agent or Lenders;

(g) promptly following receipt thereof by Borrower, copies of any material reports, plans and other statements or documents provided by NantCell, Inc.;

(h) annual financial and business projections within ten (10) days after their approval by Borrower's Board of Directors, and in any event, within thirty (30) days after the end of Borrower's fiscal year, as well as budgets, operating plans and other financial information reasonably requested by Agent.

Borrower shall not (without the consent of Agent, such consent not to be unreasonably withheld or delayed) make any change in its accounting policies or reporting practices, except as required by GAAP, the SEC the PCAOB or other applicable regulatory requirements.

Notwithstanding anything to the contrary in this Section 7.1, Borrower shall not be required to deliver any financial statements to the Agent under clauses (a), (b), (c) or (e) above with respect to any period for which it timely files such reports in the period required above with the SEC; provided that such report is publicly available on the SEC's website (or a similar website) within the time periods permitted by this Section 7.1 and Borrower promptly notifies Agent in writing (which may be by electronic mail) of the posting of any such documents. To the extent any documents required to be delivered pursuant to the terms hereof are included in materials otherwise filed with the SEC, Borrower may deliver such documents by e-mailing to Agent a link to the applicable filing posted on the SEC website currently located at [www.sec.gov](http://www.sec.gov).

The executed Compliance Certificate may be sent via email to Agent at [legal@herculestech.com](mailto:legal@herculestech.com) and [lmcguire@htgc.com](mailto:lmcguire@htgc.com). All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to [financialstatements@herculestech.com](mailto:financialstatements@herculestech.com) and [lmcguire@htgc.com](mailto:lmcguire@htgc.com) with a copy to [legal@herculestech.com](mailto:legal@herculestech.com) provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Chief Credit Officer.

7.2 Management Rights. Borrower shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrower at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than twice per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrower to discuss such books of account and records. In addition, Agent or Lender shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrower concerning significant business issues affecting Borrower. Such consultations shall not unreasonably interfere with Borrower's business operations. The parties intend that the rights granted Agent and Lender shall constitute "management rights" within the meaning of 29 C.F.R. Section 2510.3-101(d)(3)(ii), but that any advice, recommendations or participation by Agent or Lender with respect to any business issues shall not be deemed to give Agent or Lender, nor be deemed an exercise by Agent or Lender of, control over Borrower's management or policies.

7.3 Further Assurances. Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral, subject to Permitted Liens. Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, Borrower hereby authorizes Agent to execute and deliver on behalf of Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of Borrower in accordance with Section 9-504 of the UCC), collateral assignments, notices, control agreements, security agreements and other documents without the signature of Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for Borrower. Borrower shall protect and defend Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. Borrower shall not create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness, or prepay any Indebtedness (other than Secured Obligations) or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) purchase money Indebtedness pursuant to its then applicable payment schedule, (c) prepayment by any Subsidiary of (i) inter-company Indebtedness owed by such Subsidiary to any Borrower, or (ii) if such Subsidiary is not a Borrower, intercompany Indebtedness owed by such Subsidiary to another Subsidiary that is not a Borrower or (d) as otherwise permitted hereunder or approved in writing by Agent.

7.5 Collateral. Borrower shall at all times keep the Collateral, the Intellectual Property and all other property and assets used in Borrower's business or in which Borrower now or hereafter holds any interest free and clear from any legal process or Liens whatsoever (except for Permitted Liens), and shall give Agent prompt written notice of any legal process affecting the Collateral, the Intellectual Property, such other property and assets, or any Liens thereon, provided however, that the Collateral and such other property and assets may be subject to Permitted Liens except that there shall be no Liens whatsoever on Intellectual Property. Borrower shall not agree with any Person other than Agent or Lender not to encumber its property other than such negative pledges that relate solely to the asset or assets subject to a Permitted Lien or that relate solely to in-bound license agreements that by their terms expressly prohibit assignment of the related license(s) by Borrower. Borrower shall not enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of any Borrower to create, incur, assume or suffer to exist any Lien upon any of its Intellectual Property, whether now owned or hereafter acquired, to secure its obligations under the Loan Documents to which it is a party other than (a) this Agreement and the other Loan Documents, (b) any agreements governing any purchase money Liens or capital lease obligations otherwise permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby) and (c) customary restrictions on the assignment of leases, licenses and other agreements. Borrower shall cause its Subsidiaries to protect and defend such Subsidiary's title to its assets from and against all Persons claiming any interest adverse to such Subsidiary, and Borrower shall cause its Subsidiaries at all times to keep such Subsidiary's property and assets free and clear from any legal process or Liens whatsoever (except for Permitted Liens, provided however, that there shall be no Liens whatsoever on Intellectual Property), and shall give Agent prompt written notice of any legal process affecting such Subsidiary's assets.

7.6 Investments. Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments.



7.7 Distributions. Borrower shall not, and shall not allow any Subsidiary to, (a) repurchase or redeem any class of stock or other equity interest other than (i) pursuant to employee, director or consultant stock purchase or repurchase plans or other similar agreements; provided, however, in each case the repurchase or redemption price does not exceed the original consideration paid for such stock or equity interest, and (ii) the conversion of any of its convertible equity securities into other securities pursuant to the terms of such convertible securities and without any cash payments except cash in lieu of fractional shares paid in the ordinary course of business, or (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other equity interest, except that a Subsidiary may pay dividends or make distributions to Borrower, or (c) lend money to any employees, officers or directors or guarantee the payment of any such loans granted by a third party in excess of Five Hundred Thousand Dollars (\$500,000) in the aggregate or (d) waive, release or forgive any Indebtedness owed by any employees, officers or directors in excess of Five Hundred Thousand Dollars (\$500,000) in the aggregate.

7.8 Transfers. Except for Permitted Transfers and pursuant to customary equity incentive plans in the ordinary course of business, Borrower shall not, and shall not allow any Subsidiary to, voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets (including, without limitation, any equity interests in other entities held by any Borrower or any Subsidiary of Borrower that would result in a Change in Control).

7.9 Mergers or Acquisitions. Borrower shall not merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of (a) a Subsidiary which is not a Borrower into another Subsidiary or into Borrower, (b) a Borrower into another Borrower) or (c) acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person, except for Permitted Acquisitions and as permitted by Section 7.6.

7.10 Taxes. Borrower and its Subsidiaries shall pay when due all material taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Agent, Lender (to the extent assessed in connection with any Loan Document, but excluding taxes on Lender's net income) or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all material personal property tax returns in respect of the Collateral. Notwithstanding the foregoing, Borrower may contest, in good faith and by appropriate proceedings, taxes for which Borrower maintains adequate reserves therefor in accordance with GAAP.

7.11 Corporate Changes. Neither Borrower nor any Subsidiary shall change its corporate name, legal form or jurisdiction of formation without twenty (20) days' prior written notice to Agent. Neither Borrower nor any Qualified Subsidiary shall suffer a Change in Control unless and until the Secured Obligations (other than inchoate indemnity obligations) are repaid, including any applicable Prepayment Charge and the End of Term Charge in accordance with Sections 2.5 and 2.6. Neither Borrower nor any Qualified Subsidiary shall relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America. Neither Borrower nor any Qualified Subsidiary shall relocate any item of Collateral (other than (x) sales of Inventory in the ordinary course of business, (y) relocations of Equipment having an aggregate value of up to One Million Dollars (\$1,000,000) in any fiscal year, and (z) relocations of Collateral from a location described on Exhibit C to another location described on Exhibit C) unless (i) it has provided prompt written notice to Agent, (ii) such relocation is within the continental United States of America and, (iii) if such relocation is to a third party bailee, it has delivered a bailee agreement in form and substance reasonably acceptable to Agent.

7.12 Deposit Accounts. Neither Borrower nor any Qualified Subsidiary shall maintain any Deposit Accounts, or accounts holding Investment Property, except (i) Excluded Accounts and (ii) with respect to which Agent has an Account Control Agreement.

7.13 Subsidiaries. Borrower shall notify Agent of each Subsidiary formed or acquired subsequent to the Closing Date and, within fifteen (15) days of formation, shall cause any such Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement.

7.14 Use of Proceeds. Borrower agrees that the proceeds of the Term Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general corporate purposes.

7.15 Notification of Event of Default. Borrower shall notify Agent promptly upon the occurrence of any Event of Default.

7.16 Parent and its Subsidiaries on a consolidated basis shall not make Capital Expenditures during the following periods that exceed in the aggregate the amounts set forth opposite each such period:

<u>Period</u>	<u>Maximum Capital Expenditures per Period</u>
fiscal year 2017	\$12,500,000
fiscal year 2018 and each fiscal year thereafter	\$10,000,000

7.17 Foreign Subsidiary Voting Rights. Borrower shall not, and shall not permit any Subsidiary, to amend or modify any governing document of any Foreign Subsidiary of Borrower (other than an Eligible Foreign Subsidiary) the effect of which is to require a vote of greater than 50.1% of the equity interests or voting rights of such entity for any decision or action of such entity.

7.18 Limited Subsidiaries. Borrower agrees that the entities set forth on Schedule 7.18 shall collectively have no assets in excess of One Million Dollars (\$1,000,000) and none shall incur any liabilities, and (b) any Subsidiary that is or becomes a Qualified Subsidiary shall enter into a Joinder Agreement within 15 days and become a co-borrower under this Agreement.

7.19 Ownership Interests. Borrower shall not, and shall not permit any Subsidiary to, suffer a Change in Control. Any Cash held by any entity in which Borrower has full or partial

ownership rights that is consolidated, dissolved or sold, in each case, as permitted hereunder, shall be distributed to Sorrento Therapeutics, Inc. within five (5) Business Days, in an amount equal to the Cash amount multiplied by the applicable Change in Control Percentage.

7.20 Fundraising Requirements. Borrower shall achieve the 2016 Year-End Fundraising Requirement prior to December 31, 2016, and Borrower shall achieve the 2017 Q1 Fundraising Requirement prior to March 31, 2017.

7.21 Minimum Cash. At all times prior to achievement of both the Corporate Milestone and the Fundraising Milestone, Borrower shall maintain Unrestricted Cash in an amount greater than or equal to Twenty Five Million Dollars (\$25,000,000) *plus* the amount of Borrower's accounts payable under GAAP not paid after the 90th day following the invoice date for such accounts payable. Borrower shall provide Agent evidence of compliance with the financial covenants under this Section 7.21 in each Compliance Certificate and upon request in form and substance reasonably acceptable to Agent and supporting documentation reasonably requested by Agent, including certification of such compliance by the Chief Executive Officer or Chief Financial Officer of Borrower.

7.22 Post-Closing Obligations. Notwithstanding any provision herein or in any other Loan Document to the contrary, to the extent not actually delivered on or prior to the Closing Date, Borrower shall deliver to Agent (a) fully executed copies of each Account Control Agreement with Silicon Valley Bank in form and substance satisfactory to Agent within three (3) Business Days after the Closing Date, (b) full copies of all directors and officers insurance policies within thirty (30) days after the Closing Date, (c) fully executed copies of landlord waivers with respect to Borrower's leased locations at 8395 Camino Santa Fe, San Diego, CA 92121 and 9380 Judicial Drive, San Diego CA 92121, each in form and substance satisfactory to Agent within ten (10) Business Days after the Closing Date and (d) insurance endorsements as required pursuant to Section 6.2 within thirty (30) days after the Closing Date .

#### **SECTION 8. RIGHT TO INVEST**

8.1 Lender or its assignee or nominee shall have the right, in its discretion, to participate in the Subsequent Financing in an amount of up to One Million Five Hundred Thousand Dollars (\$1,500,000) on the same terms, conditions and pricing afforded to others participating in the Subsequent Financing. This Section 8.1, and all rights and obligations hereunder, shall survive for so long this Agreement remains in effect.

#### **SECTION 9. EVENTS OF DEFAULT**

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrower fails to pay any amount due under this Agreement or any of the other Loan Documents on the applicable due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or Borrower's bank if Borrower had the funds to make the

payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay; or

9.2 Covenants. Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among Borrower, Agent and Lender, and (a) with respect to a default under any covenant under this Agreement (other than under Sections 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.15, 7.16, 7.17, 7.18, 7.19, 7.20, 7.21 and 7.22), any other Loan Document (other than under Section 5.(h) of the Pledge Agreement) or any other agreement among Borrower, Agent and Lender, such default continues for more than ten (10) days after the earlier of the date on which (i) Agent or Lender has given notice of such default to Borrower and (ii) Borrower has actual knowledge of such default or (b) with respect to a default under any of Sections 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.15, 7.16, 7.17, 7.18, 7.19, 7.20, 7.21 and 7.22 of this Agreement and Section 5.(h) of the Pledge Agreement, the occurrence of such default; or

9.3 Material Adverse Effect. A circumstance has occurred that would reasonably be expected to have a Material Adverse Effect;

9.4 Representations. Any representation or warranty made by Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Borrower (A) (i) shall make an assignment for the benefit of creditors; or (ii) shall be unable to pay its debts as they become due, or be unable to pay or perform under the Loan Documents, or shall become insolvent; or (iii) shall file a voluntary petition in bankruptcy; or (iv) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (v) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of Borrower or of all or any substantial part (i.e., 33-1/3% or more) of the assets or property of Borrower; or (vi) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (vii) Borrower or its directors or majority shareholders shall take any action initiating any of the foregoing actions described in clauses (i) through (vi); or (B) either (i) forty-five (45) days shall have expired after the commencement of an involuntary action against Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of Borrower being stayed; or (ii) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be timely appealed; or (iii) Borrower shall file any answer admitting or not contesting the material allegations of a petition filed against Borrower in any such proceedings; or (iv) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (v) thirty (30) days shall have expired after the appointment, without the consent or acquiescence of Borrower, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower without such appointment being vacated; or

9.6 Attachments; Judgments; Settlement. Any portion of Borrower's assets is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered for the payment of money (not covered by independent third party insurance as to which liability has been accepted by such insurance carrier), individually or in the aggregate, of at least One Million Two Hundred Fifty Thousand Dollars (\$1,250,000), and such judgment remains unsatisfied, unvacated, or unstayed for a period of twenty (20) days after the entry thereof, or Borrower is enjoined or in any way prevented by court order from conducting any material part of its business or a settlement or similar agreement is entered into with respect to the Wildcat Litigation or the Roger Williams Litigation requiring the payment by Borrower of greater than the respective amounts set forth in Schedule 9.6; or

9.7 Other Obligations. The occurrence of any default (after giving effect to any grace or cure period) under any agreement or obligation of Borrower involving any Indebtedness in excess of One Million Two Hundred Fifty Thousand Dollars (\$1,250,000), which has resulted in a right by a third party, whether or not exercised, to accelerate the maturity of such Indebtedness.

9.8 [RESERVED]

## **SECTION 10. REMEDIES**

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in Borrower's name any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, Borrower hereby grants Agent an irrevocable power of attorney coupled with an interest, and (iii) Agent may notify any of Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent may, and at the direction of the Required Lenders shall, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower. Agent may require Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent that is reasonably convenient to Agent and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, and the Default Rate interest), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations and any other obligations which, by their specific terms, are to survive the termination of this Agreement), to any creditor holding a junior Lien on the Collateral, or to Borrower or its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of Borrower or any other Person, and Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

## **SECTION 11. MISCELLANEOUS**

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

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.  
Legal Department  
Attention: Chief Legal Officer and Lake McGuire  
400 Hamilton Avenue, Suite 310  
Palo Alto, CA 94301  
email: legal@herculestech.com; lmcguire@htgc.com  
Telephone: 650-289-3060

(b) If to Lender:

HERCULES CAPITAL, INC.  
Legal Department  
Attention: Chief Legal Officer and Lake McGuire  
400 Hamilton Avenue, Suite 310  
Palo Alto, CA 94301  
email: legal@herculestech.com; lmcguire@htgc.com  
Telephone: 650-289-3060

(c) If to Borrower:

SORRENTO THERAPEUTICS, INC.  
Attention: Kevin Herde  
9380 Judicial Drive,  
San Diego, CA 92121  
email: kherde@sorrentotherapeutics.com  
Telephone: 858-210-3736

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated October 11, 2016).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrower party to the relevant Loan Document may, or, with the written consent of the Required Lenders, Agent and Borrower party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of the Lenders or of Borrower hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or the Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan, reduce the stated rate of any interest or fee payable hereunder) or extend the scheduled date of any payment thereof, or increase the amount, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Borrower of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of the Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrower, the Lender, the Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and shall survive the execution and delivery of this Agreement. Sections 6.3 and 8.1 shall survive the termination of this Agreement.

11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrower, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrower (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to an Affiliate of any Lender or Agent shall be allowed.



11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrower of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.10 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWER, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWER AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrower and Lender; Claims that arise out of or are in any way connected to the relationship among Borrower, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.11 Professional Fees. Borrower promises to pay Agent's and Lender's fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, Borrower promises to pay any and all reasonable attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to Borrower or the Collateral, and any appeal or review thereof, in each case that constitutes a Liability for which Borrower is obligated to indemnify an Indemnified Person under Section 6.3; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of Borrower's estate, and any appeal or review thereof.

11.12 Confidentiality. Agent and Lender acknowledge that certain items of Collateral and information provided to Agent and Lender by Borrower are confidential and proprietary information of Borrower, if and to the extent such information either (x) is marked as confidential by Borrower at the time of disclosure, or (y) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrower, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their sole discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public through no fault of Agent or Lender; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents.

11.13 Assignment of Rights. Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Note(s)(if any), it will endorse thereon a notation as to the portion of the principal of the Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.14 Revival of Secured Obligations. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against Borrower for liquidation or reorganization, if Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and indefeasible payment to Agent or Lender in Cash.

11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrower unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, the Lender and Borrower.

11.17 Agency.

(a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as Agent hereunder and under the other Loan Documents and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Lender agrees to indemnify Agent in its capacity as such (to the extent not reimbursed by Borrower and without limiting the obligation of Borrower to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Loan Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. The Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Agent is required to exercise as directed in writing by the Lender, provided that Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Agent to liability or that is contrary to any Loan Document or applicable law; and

(iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and Agent shall not be liable for the failure to disclose, any information relating to Borrower or any of its Affiliates that is communicated to or obtained by any Person serving as Agent or any of its Affiliates in any capacity.

(e) The Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Lender or as Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) The Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.

## 11.19 Multiple Borrowers.

(a) Borrower's Agent. Each Borrower hereby irrevocably appoints Sorrento Therapeutics, Inc. as its agent, attorney-in-fact and legal representative for all purposes, including requesting disbursement of the Term Loan and receiving account statements and other notices and communications to Borrowers (or any of them) from Agent or any Lender. The Agent may rely, and shall be fully protected in relying, on any request for the Term Loan, disbursement instruction, report, information or any other notice or communication made or given by the Company, whether in its own name or on behalf of one or more of the other Borrowers, and Agent shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrowers' obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require Agent to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other person, or to proceed against any property of any kind which secures all or any part of the Secured Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with Agent or any Indebtedness of Agent or any Lender to any other Borrower, or to exercise any other right or power, or pursue any other remedy Agent or any Lender may have; (ii) any defense arising by reason of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other person, or by reason of the cessation from any cause whatsoever of any liability of any other Borrower or any guarantor or any endorser, co-maker or other person, with respect to all or any part of the Secured Obligations, or by reason of any act or omission of Agent or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other person or any Secured Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of Agent to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other person; (iv) any defense based upon or arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against any other Borrower or any guarantor or any endorser, co-maker or other person, including without limitation any discharge of, or bar against collecting, any of the Secured Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Secured Obligations have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of any Borrower hereunder except the full performance and payment of all of the Secured Obligations. If any claim is ever made upon Agent for repayment or recovery of any amount or amounts received by Agent in payment of or on account of any of the Secured Obligations, because of any claim that any such payment constituted a preferential transfer or fraudulent conveyance, or for any other reason whatsoever, and Agent repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over Agent or any of its property, or by reason of any settlement or compromise of any such claim effected by Agent with any such claimant (including without limitation any other Borrower), then and in any such event, each Borrower agrees that any such judgment, decree, order, settlement and compromise shall be binding upon such Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Secured Obligations, or any release of any of the Secured Obligations, and each Borrower shall be and remain liable to Agent and the Lenders under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by Agent or any Lender, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Secured Obligations, including (but not limited to) any of the foregoing rights which Borrower may have under any present or future document or agreement with any other Borrower or other person, and including (but not limited to) any of the foregoing rights which any Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by Borrower and without affecting or impairing in any way the obligations or liability of Borrower hereunder, Agent may, from time to time before or after revocation of this Agreement, do any one or more of the following in its sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Secured Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Secured Obligations or any guaranty of any or all of the Secured Obligations, or on which Agent at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or any part of the Secured Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of Borrower; (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any Indebtedness whatsoever owing from such person or secured by such Collateral or security, in such manner and order as Agent determines in its sole discretion, and regardless of whether such Indebtedness is part of the Secured Obligations, is secured, or is due and payable. Each Borrower consents and agrees that Agent shall be under no obligation to marshal any assets in favor of Borrower, or against or in payment of any or all of the Secured Obligations. Each Borrower further consents and agrees that Agent shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Secured Obligations. Without limiting the generality of the foregoing, Agent shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Secured Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against such Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by Agent. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and such Borrower is not relying in any manner upon any representation or statement of Agent or any Lender with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower's financial condition and any other matter pertinent hereto as such Borrower may desire, and such Borrower is not relying upon or expecting Agent to furnish to it any information now or hereafter in Agent's possession concerning the same or any other matter.

(e) Subordination. All Indebtedness of a Borrower now or hereafter arising held by another Borrower is subordinated to the Secured Obligations and Borrower holding the Indebtedness shall take all actions reasonably requested by Agent to effect, to enforce and to give notice of such subordination.

(SIGNATURES TO FOLLOW)



IN WITNESS WHEREOF, Borrower, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

**BORROWER:**

**SORRENTO THERAPEUTICS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**CONCORTIS BIOSYSTEMS, CORP.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**ARK ANIMAL HEALTH, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**SORRENTO BIOLOGICS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

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*[Signature Pages to Loan and Security Agreement (Sorrento-Hercules)]*

**TNK THERAPEUTICS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**SCINTILLA PHARMACEUTICALS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**LA CELL, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

**SINIWEST HOLDING CORP.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

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*[Signature Pages to Loan and Security Agreement (Sorrento-Hercules)]*

**LEVENA BIOPHARMA US, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

**SORRENTO BIOSERVICES, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

**SCILEX PHARMACEUTICALS INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

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*[Signature Pages to Loan and Security Agreement (Sorrento-Hercules)]*

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Accepted in Palo Alto, California:

**AGENT:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

**LENDER:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

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*[Signature Pages to Loan and Security Agreement (Sorrento-Hercules)]*

## FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT (this “ **Amendment** ”), dated as of December 27, 2016 (the “ **Amendment Effective Date** ”), is entered into by and among Sorrento Therapeutics, Inc., a Delaware corporation (“Parent”), Concorthis Biosystems, Corp., a Delaware corporation, Ark Animal Health, Inc., a Delaware corporation, TNK Therapeutics, Inc., a Delaware corporation, Sorrento Biologics, Inc., a Delaware corporation, Scintilla Pharmaceuticals, Inc., a Delaware corporation, LA Cell, Inc., a Delaware corporation, SiniWest Holding Corp., a Delaware corporation, Levena Biopharma US, Inc., a Delaware corporation, Sorrento BioServices, Inc., a Delaware corporation, Scilex Pharmaceuticals Inc., a Delaware corporation, and each of their Qualified Subsidiaries (together with “Parent” hereinafter collectively referred to as the “ **Borrower** ”), the several banks and other financial institutions or entities from time to time parties thereto as Lender, constituting the Required Lenders, and HERCULES CAPITAL, INC., formerly known as Hercules Technology Growth Capital, Inc., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, together with its successors and assigns in such capacity, “ **Agent** ”).

The Borrower, the Lender and Agent are parties to a Loan and Security Agreement dated as of November 23, 2016 (as amended, restated or modified from time to time, the “ **Loan and Security Agreement** ”). The Borrower has requested that the Lender agree to certain amendments to the Loan and Security Agreement. The Lender have agreed to such request, subject to the terms and conditions hereof.

Accordingly, the parties hereto agree as follows:

### SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan and Security Agreement** . All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan and Security Agreement.

(b) **Interpretation** . The rules of interpretation set forth in Section 1.1 of the Loan and Security Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

### SECTION 2 Amendments to the Loan and Security Agreement.

(a) The Loan and Security Agreement shall be amended as follows effective as of the Amendment Effective Date:

(i) Deleted Definitions . are hereby deleted in their entirety: “2016 Year-End Fundraising Requirement” and “2017 Q1 Fundraising Requirement”.

(ii) New Definitions . The following definitions are added to Section 1.1 in their proper alphabetical order:

“First Amendment Effective Date” means December 27, 2016.

“Initial Fundraising Requirement” means Borrower’s receipt after the Closing Date and prior to March 15, 2017, of at least Forty Three Million Two Hundred Fifty Thousand Dollars (\$43,250,000) of unrestricted (including not subject to any clawback, redemption, escrow or similar contractual restriction, but excluding any restriction in favor of Agent) net cash proceeds from (a) one or more Equity Events of (x) Borrower (other than Parent) with investors and with terms and conditions reasonably satisfactory to Agent or (y) Parent, or (b) the collection of the 2016 PIPE Notes Receivable in cash outstanding as of the Closing Date.

(iii) Amended Definitions. The following definition is hereby amended as follows:

“Fundraising Milestone”. The definition of “Fundraising Milestone” is hereby amended by replacing “2016 Year-End Fundraising Requirement and the 2017 Q1 Fundraising Requirement” with “Initial Fundraising Requirement” therein.

(iv) Section 2.9. Section 2.9 is hereby amended by replacing “December 31, 2016” with “the First Amendment Effective Date” in each instance therein.

(v) Section 7.20. Section 7.20 is hereby amended and restated as follows:

7.20 Initial Fundraising Requirement. Borrower shall achieve the Initial Fundraising Requirement prior to March 15, 2017.

(vi) Section 7.21. Section 7.21 is hereby amended and restated as follows:

7.21 Minimum Cash. At all times prior to achievement of both the Corporate Milestone and the Fundraising Milestone, Borrower shall maintain Unrestricted Cash in an amount greater than or equal to Twenty Five Million Dollars (\$25,000,000) plus the amount of Borrower’s accounts payable under GAAP not paid after the 90th day following the invoice date for such accounts payable; *provided* that at all times prior to achievement of the Initial Fundraising Requirement, Borrower shall maintain Unrestricted Cash in an amount greater than or equal to Fifty Million Dollars (\$50,000,000) plus the amount of Borrower’s accounts payable under GAAP not paid after the 90th day following the invoice date for such accounts payable. Borrower shall provide Agent evidence of compliance with the financial covenants under this Section 7.21 (a) until Borrower’s achievement of the Initial Fundraising Requirement, no less frequently than weekly, (b) in each Compliance Certificate and (c) upon request, in each case in form and substance acceptable to Agent and with supporting documentation requested by Agent, including, without limitation, evidence of bank statement activity from such week (including ending balances) and certification of such compliance by the Chief Executive Officer or Chief Financial Officer of Borrower.

(vii) Compliance Certificate. Exhibit F (Compliance Certificate) of the Loan and Security Agreement is hereby amended and restated in its entirety as set forth in Addendum I hereto.

(b) **References Within Loan and Security Agreement**. Each reference in the Loan and Security Agreement to “this Agreement” and the words “hereof,” “herein,” “hereunder,” or words of like import, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment.

**SECTION 3 Conditions of Effectiveness.** The effectiveness of Section 2 of this Amendment shall be subject to the satisfaction of each of the following conditions precedent:

(a) **Fees and Expenses**. The Borrower shall have paid (i) an amendment fee of \$250,000, which fee shall be due and payable and deemed fully earned as of the Amendment Effective Date, (ii) the \$210,000 fee set forth in Section 2.9 of the Agreement, (iii) all attorney fees and other costs and expenses then due in accordance with Section 5(e), and (iv) all other fees, costs and expenses, if any, due and payable as of the Amendment Effective Date under the Loan and Security Agreement.

(b) **This Amendment**. Agent shall have received this Amendment, executed by Agent, the Lender and the Borrower.

(c) **Representations and Warranties; No Default**. On the Amendment Effective Date, after giving effect to the amendment of the Loan and Security Agreement contemplated hereby:

(i) The representations and warranties contained in Section 4 shall be true and correct in all material respects on and as of the Amendment Effective Date as though made on and as of such date; and

- (ii) There exist no Events of Default or events that with the passage of time would result in an Event of Default.

**SECTION 4 Representations and Warranties** . To induce Agent and Lender to enter into this Amendment, the Borrower hereby confirms, as of the date hereof, (a) that the representations and warranties made by it in Section 5 of the Loan and Security Agreement and in the other Loan Documents are true and correct in all material respects; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; (b) that there has not been and there does not exist a Material Adverse Change; and (c) that the information included in the Perfection Certificate delivered to Agent on the Effective Date remains true and correct. For the purposes of this Section 4, (i) each reference in Section 5 of the Loan and Security Agreement to “this Agreement,” and the words “hereof,” “herein,” “hereunder,” or words of like import in such Section, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment, and (ii) any representations and warranties which relate solely to an earlier date shall not be deemed confirmed and restated as of the date hereof (provided that such representations and warranties shall be true, correct and complete in all material respects as of such earlier date).

**SECTION 5 Miscellaneous.**

(a) **Loan Documents Otherwise Not Affected; Reaffirmation** . Except as expressly amended pursuant hereto or referenced herein, the Loan and Security Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. The Lender’s and Agent’s execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. The Borrower hereby reaffirms the grant of security under Section 3.1 of the Loan and Security Agreement and hereby reaffirms that such grant of security in the Collateral secures all Secured Obligations under the Loan and Security Agreement, including without limitation any Term Loans funded on or after the Amendment Effective Date, as of the date hereof.

(b) **Conditions** . For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the Amendment Effective Date specifying its objection thereto.

(c) **Release** . In consideration of the agreements of Agent and each Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lenders and all such other persons being hereinafter referred to collectively as the “**Releasees**” and individually as a “**Releasee**”), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above.

(d) **No Reliance** . The Borrower hereby acknowledges and confirms to Agent and the Lender that the Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses** . The Borrower agrees to pay to Agent on the Amendment Effective Date the out-of-pocket costs and expenses of Agent and the Lenders party hereto, and the fees and disbursements of counsel to Agent and the Lenders party hereto (including allocated costs of internal counsel), in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the Amendment Effective Date or after such date.

(f) **Binding Effect** . This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law**. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments** . This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions**. Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts** . This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

(k) **Loan Documents** . This Amendment shall constitute a Loan Document.

*[Balance of Page Intentionally Left Blank; Signature Pages Follow]*



IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment, as of the date first above written.

BORROWER:

SORRENTO THERAPEUTICS, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

CONCORTIS BIOSYSTEMS, CORP.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

ARK ANIMAL HEALTH, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

SORRENTO BIOLOGICS, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

TNK THERAPEUTICS, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

[Signature Page to First Amendment to Loan and Security Agreement]

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SCINTILLA PHARMACEUTICALS, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

LA CELL, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

SINIWEST HOLDING CORP.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

LEVENA BIOPHARMA US INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President and Chief Executive Officer

SORRENTO BIOSERVICES, INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

[Signature Page to First Amendment to Loan and Security Agreement]

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SCILEX PHARMACEUTICALS INC.

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

[Signature Page to First Amendment to Loan and Security Agreement]

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AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang

Print Name: Zhuo Huang

Title: Associate General Counsel

[Signature Page to First Amendment to Loan and Security Agreement]

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**Addendum I**

**EXHIBIT F**

**COMPLIANCE CERTIFICATE**

Hercules Capital, Inc. (as "Agent")  
400 Hamilton Avenue, Suite 310  
Palo Alto, CA 94301

Reference is made to that certain Loan and Security Agreement dated November 23, 2016 and the Loan Documents (as defined therein) entered into in connection with such Loan and Security Agreement all as may be amended from time to time (hereinafter referred to collectively as the "Loan Agreement") by and among Hercules Capital, Inc. (the "Agent"), the several banks and other financial institutions or entities from time to time party thereto (collectively, the "Lender") and Hercules Capital, Inc., as agent for the Lender (the "Agent") and Sorrento Therapeutics, Inc. (the "Company") and each other Qualified Subsidiary as Borrower. All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Company, knowledgeable of all Company financial matters, and is authorized to provide certification of information regarding the Company; hereby certifies, in such capacity, that in accordance with the terms and conditions of the Loan Agreement, the Company is in compliance for the period ending \_\_\_\_\_ of all covenants, conditions and terms of the Loan Agreement and hereby reaffirms that all representations and warranties contained therein are true and correct in all material respects on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, after giving effect in all cases to any standard(s) of materiality contained in the Loan Agreement as to such representations and warranties. Attached are the required documents supporting the above certification. The undersigned further certifies that these are prepared in accordance with GAAP (except for the absence of footnotes with respect to unaudited financial statements and subject to normal year-end adjustments) and are consistent from one period to the next except as explained below.

**REPORTING REQUIREMENT**

Interim Balance Sheet and/or Financial Statements (as required pursuant to Section 7.1(a))  
Interim Financial Statements  
Audited Financial Statements

**REQUIRED**

Monthly within 45 days  
Quarterly within 45 days  
FYE within 90 days

**CHECK IF ATTACHED**

**7.21 – Minimum Cash**

(I) Has the Corporate Milestone been achieved?  Yes;  No

(II) Has the Fundraising Milestone been achieved?  Yes;  No

If Yes on both (I) and (II), in compliance.

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If No on either (I) or (II):

(A) Unrestricted Cash: \$ \_\_\_\_\_

(B) amount of Borrower's accounts payable under GAAP and not paid after the 90th day following the invoice date for such accounts payable:  
\$ \_\_\_\_\_

(C) item (A) minus item (B): \$ \_\_\_\_\_

Is item (C) greater than or equal to:

*If prior to achievement of the Initial Fundraising Requirement: \$50,000,000?*

*If after to achievement of the Initial Fundraising Requirement: \$25,000,000?*

Yes (in compliance);  No (not in compliance)

The undersigned hereby also confirms the below disclosed accounts represent all depository accounts and securities accounts presently open in the name of each Borrower or Borrower Subsidiary/Affiliate, as applicable.

		<b>Depository AC #</b>	<b>Financial Institution</b>	<b>Account Type (Depository / Securities)</b>	<b>Last Month Ending Account Balance</b>	<b>Purpose of Account</b>
<b>BORROWER Name/Address:</b>						
	<b>1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
<b>BORROWER SUBSIDIARY / AFFILIATE COMPANY Name/Address</b>						
	<b>1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					

Very Truly Yours,  
Sorrento Therapeutics, Inc.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

\*\*\* Text Omitted and Filed Separately  
Confidential Treatment Requested  
Under 17 C.F.R. §§ 200.80(b)(4)  
and 240.24b-2

## SECOND AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS SECOND AMENDMENT TO LOAN AND SECURITY AGREEMENT (this “**Amendment**”), dated as of March 2, 2017 (the “**Second Amendment Effective Date**”), is entered into by and among Sorrento Therapeutics, Inc., a Delaware corporation (“**Parent**”), Concertis Biosystems, Corp., a Delaware corporation, Ark Animal Health, Inc., a Delaware corporation, TNK Therapeutics, Inc., a Delaware corporation, Sorrento Biologics, Inc., a Delaware corporation, Scintilla Pharmaceuticals, Inc., a Delaware corporation, LA Cell, Inc., a Delaware corporation, SiniWest Holding Corp., a Delaware corporation, Levena Biopharma US, Inc., a Delaware corporation, BioServ Corporation (formerly known as Sorrento BioServices, Inc.), a Delaware corporation, Scilex Pharmaceuticals Inc., a Delaware corporation, SNAN Holdco LLC, a Delaware limited liability company, and each of their Qualified Subsidiaries (together with “Parent” hereinafter collectively referred to as the “**Borrower**”), the several banks and other financial institutions or entities from time to time parties thereto as Lender, constituting the Required Lenders, and HERCULES CAPITAL, INC., formerly known as Hercules Technology Growth Capital, Inc., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, together with its successors and assigns in such capacity, “**Agent**”).

The Borrower, the Lender and Agent are parties to a Loan and Security Agreement dated as of November 23, 2016 (as amended by that certain First Amendment to Loan and Security Agreement dated as of December 27, 2016, and as may be further amended, restated or modified from time to time, the “**Loan and Security Agreement**”). The Borrower has requested that the Lender agree to certain amendments to the Loan and Security Agreement. The Lender has agreed to such request, subject to the terms and conditions hereof.

Accordingly, the parties hereto agree as follows:

### SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan and Security Agreement** . All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan and Security Agreement.

(b) **Interpretation** . The rules of interpretation set forth in Section 1.1 of the Loan and Security Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

### SECTION 2 Amendments to the Loan and Security Agreement.

(a) The Loan and Security Agreement shall be amended as follows effective as of the Second Amendment Effective Date:

(i) **New Definitions** . The following definitions are added to Section 1.1 in their proper alphabetical order:

[...\*\*\*...]

“Second Amendment Effective Date” means March 2, 2017.

(ii) **Amended Definition** . The following definition is hereby amended as follows:

The definition of “Permitted Indebtedness” is hereby amended by removing the word “and” before clause (xv), renumbering the current cause (xv) as clause (xvi) and inserting the following as a new clause (xv):

“(xv) [...\*\*\*...]; and”

(b) **References Within Loan and Security Agreement** . Each reference in the Loan and Security Agreement to “this Agreement” and the words “hereof,” “herein,” “hereunder,” or words of like import, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment.

**SECTION 3 Conditions of Effectiveness.** The effectiveness of Section 2 of this Amendment shall be subject to the satisfaction of each of the following conditions precedent:

(a) **Fees and Expenses** . The Borrower shall have paid (i) all attorney fees and other costs and expenses then due in accordance with Section 5(e) , and (ii) all other fees, costs and expenses, if any, due and payable as of the Second Amendment Effective Date under the Loan and Security Agreement.

(b) **This Amendment** . Agent shall have received this Amendment, executed by Agent, the Lender and the Borrower.

(c) **Representations and Warranties; No Default** . On the Second Amendment Effective Date, after giving effect to the amendment of the Loan and Security Agreement contemplated hereby:

(i) The representations and warranties contained in Section 4 shall be true and correct in all material respects on and as of the Second Amendment Effective Date as though made on and as of such date; and

**\*Confidential Treatment Requested**



- (ii) There exist no Events of Default or events that with the passage of time would result in an Event of Default.

**SECTION 4 Representations and Warranties** . To induce Agent and Lender to enter into this Amendment, the Borrower hereby confirms, as of the date hereof, (a) that the representations and warranties made by it in Section 5 of the Loan and Security Agreement and in the other Loan Documents are true and correct in all material respects; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; (b) that there has not been and there does not exist a Material Adverse Change; and (c) that the information included in the Perfection Certificate delivered to Agent on the Effective Date remains true and correct. For the purposes of this Section 4, any representations and warranties which relate solely to an earlier date shall not be deemed confirmed and restated as of the date hereof (provided that such representations and warranties shall be true, correct and complete in all material respects as of such earlier date).

**SECTION 5 Acknowledgment** . Each of Lender and Agent acknowledges and agrees that Borrower's completion of the [...\*\*\*...] by March 15, 2017 pursuant to which Borrower receives net proceeds of at least \$43,250,000 shall constitute Borrower's achievement of the Initial Fundraising Requirement pursuant to the Loan and Security Agreement.

**SECTION 6 Miscellaneous.**

(a) **Loan Documents Otherwise Not Affected; Reaffirmation** . Except as expressly amended pursuant hereto or referenced herein, the Loan and Security Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. The Lender's and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. The Borrower hereby reaffirms the grant of security under Section 3.1 of the Loan and Security Agreement and hereby reaffirms that such grant of security in the Collateral secures all Secured Obligations under the Loan and Security Agreement, including without limitation any Term Loans funded on or after the Second Amendment Effective Date, as of the date hereof.

(b) **Conditions** . For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the Second Amendment Effective Date specifying its objection thereto.

(c) **Release** . In consideration of the agreements of Agent and each Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and its successors and assigns, and its present and

**\*Confidential Treatment Requested**

former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lenders and all such other persons being hereinafter referred to collectively as the “ **Releasees** ” and individually as a “ **Releasee** ”), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan and Security Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above.

(d) **No Reliance** . The Borrower hereby acknowledges and confirms to Agent and the Lender that the Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses** . The Borrower agrees to pay to Agent on the Second Amendment Effective Date the out-of-pocket costs and expenses of Agent and the Lenders party hereto, and the fees and disbursements of counsel to Agent and the Lenders party hereto (including allocated costs of internal counsel), in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the Second Amendment Effective Date or after such date.

(f) **Binding Effect** . This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law**. This Amendment, the Loan and Security Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments** . This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions.** Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts.** This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

(k) **Loan Documents.** This Amendment shall constitute a Loan Document.

*[Balance of Page Intentionally Left Blank; Signature Pages Follow]*

IN WITNESS WHEREOF , the parties hereto have duly executed this Amendment, as of the date first above written.

**BORROWER:**

**SORRENTO THERAPEUTICS, INC.**

Signature:  /s/Henry Ji, Ph.D. \_\_\_\_\_

Print Name: Henry Ji, Ph.D.

Title: CEO

**CONCORTIS BIOSYSTEMS, CORP.**

Signature:  /s/Henry Ji, Ph.D. \_\_\_\_\_

Print Name: Henry Ji, Ph.D.

Title: CEO

**ARK ANIMAL HEALTH, INC.**

Signature:  /s/Henry Ji, Ph.D. \_\_\_\_\_

Print Name: Henry Ji, Ph.D.

Title: CEO

**SORRENTO BIOLOGICS, INC.**

Signature:  /s/Henry Ji, Ph.D. \_\_\_\_\_

Print Name: Henry Ji, Ph.D.

Title: CEO

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*[Signature Page to Second Amendment to Loan and Security Agreement (Sorrento/Hercules)]*

**TNK THERAPEUTICS, INC.**

Signature:     /s/Henry Ji, Ph.D.    

Print Name: Henry Ji, Ph.D.

Title: CEO

**SCINTILLA PHARMACEUTICALS, INC.**

Signature:     /s/Henry Ji, Ph.D.    

Print Name: Henry Ji, Ph.D.

Title: Chairman

**LA CELL, INC.**

Signature:     /s/Henry Ji, Ph.D.    

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

**SINIWEST HOLDING CORP.**

Signature:     /s/Henry Ji, Ph.D.    

Print Name: Henry Ji, Ph.D.

Title: President

**LEVENA BIOPHARMA US INC.**

Signature:     /s/Henry Ji, Ph.D.    

Print Name: Henry Ji, Ph.D.

Title: Chairman



**AGENT:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

**LENDER:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

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*[Signature Page to Second Amendment to Loan and Security Agreement (Sorrento/Hercules)]*

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### THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS **THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT** (this “ **Amendment** ”), dated as of March 15, 2017 (the “ **Third Amendment Effective Date** ”), is entered into by and among Sorrento Therapeutics, Inc., a Delaware corporation (“ **Parent** ”), Concertis Biosystems, Corp., a Delaware corporation, Ark Animal Health, Inc., a Delaware corporation, TNK Therapeutics, Inc., a Delaware corporation, Sorrento Biologics, Inc., a Delaware corporation, Scintilla Pharmaceuticals, Inc., a Delaware corporation, LA Cell, Inc., a Delaware corporation, SiniWest Holding Corp., a Delaware corporation, Levena Biopharma US, Inc., a Delaware corporation, BioServ Corporation (formerly known as Sorrento BioServices, Inc.), a Delaware corporation, Scilex Pharmaceuticals Inc., a Delaware corporation, SNAN Holdco LLC, a Delaware limited liability company and each of their Qualified Subsidiaries (together with “Parent” hereinafter collectively referred to as the “ **Borrower** ”), the several banks and other financial institutions or entities from time to time parties thereto as Lender, constituting the Required Lenders, and HERCULES CAPITAL, INC., formerly known as Hercules Technology Growth Capital, Inc., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, together with its successors and assigns in such capacity, “ **Agent** ”).

The Borrower, the Lender and Agent are parties to a Loan and Security Agreement dated as of November 23, 2016 (as amended by that certain First Amendment to Loan and Security Agreement dated as of December 27, 2016, that certain Second Amendment to Loan and Security Agreement dated as of March 2, 2017 and as may be further amended, restated or modified from time to time, the “ **Loan and Security Agreement** ”). The Borrower has requested that the Lender agree to certain amendments to the Loan and Security Agreement. The Lender has agreed to such request, subject to the terms and conditions hereof.

Accordingly, the parties hereto agree as follows:

#### **SECTION 1 Definitions; Interpretation.**

(a) **Terms Defined in Loan and Security Agreement** . All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan and Security Agreement.

(b) **Interpretation** . The rules of interpretation set forth in Section 1.1 of the Loan and Security Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

#### **SECTION 2 Amendments to the Loan and Security Agreement.**

(a) The Loan and Security Agreement shall be amended as follows effective as of the Third Amendment Effective Date:



(i) **Tranche II** . The parties hereby agree that the Lenders have no commitment to fund any Tranche II Term Loan. In furtherance of the foregoing, the following provisions of the Loan and Security Agreement are hereby removed in their entirety and replaced with “[Reserved]” where applicable:

- a. Recital B.;
- b. Recital D.(ii);
- c. the following definitions:
  - i. “Interest Only Extension Conditions”;
  - ii. “Maximum Tranche II Term Loan Amount;
  - iii. “Tranche II Term Loan(s)”;
  - iv. “Tranche II Term Loan Advance”;
  - v. “Tranche II Term Loan Advance Period”; and
- d. Sections 2.2(a)(ii) and the reference to “Tranche II Term Loans” in the lead-in to Section 2.2(a).

(ii) **Amended Recital**. Recital C is hereby amended by replacing “Fifteen Million Dollars (\$15,000,000)” with “Twenty-Five Million Dollars (\$25,000,000)” therein.

(iii) **Amended Definitions** . The following definition is hereby amended as follows:

“Initial Fundraising Requirement” is hereby amended by replacing “March 15, 2017” with “March 23, 2017” therein.

(iv) **Amended and Restated Definitions** . The following definitions are hereby amended and restated in their entirety as follows:

“Amortization Date” means July 1, 2018.

“End of Term Amount” means two and one-half percent (2.50%) of the Tranche I Term Loan Advance and five and one half percent (5.50%) of all other Term Loan Advances.

“Term Loan” means the Tranche I Term Loan and, as applicable, the Tranche III Term Loan.

(v) **Section 2.2(a)(iii)** . Section 2.2(a)(iii) is hereby amended by replacing “Fifteen Million Dollars (\$15,000,000)” with “Twenty-Five Million Dollars (\$25,000,000)” therein.

(vi) **Section 2.10** . A new Section 2.10 is hereby added to the Loan and Security Agreement as follows:

2.10 In addition to any other fees due and payable hereunder (including, for the avoidance of doubt, any fee payable pursuant to Section 2.9 herein), Borrower shall pay Agent for the benefit of the Lenders a fee equal to One Million Five Hundred Thousand Dollars (\$1,500,000) on the earliest to occur of (i) March 23, 2017 and (ii) the achievement of the Initial Fundraising Requirement, which fee shall be due and payable on such date and deemed fully earned as of the date hereof.

(vii) **Section 4.2(c)** . Section 4.2(c) of the Loan and Security Agreement is hereby amended by replacing “the fee set forth in Section 2.9” with “the fees set forth in Section 2.9 and Section 2.10” therein.

(viii) **Section 7.20**. Section 7.20 of the Loan and Security Agreement is hereby amended by replacing “March 15, 2017” with “March 23, 2017” therein.

(ix) **Section 7.21** . Section 7.21 of the Loan and Security Agreement is hereby amended by replacing “Fifty Million Dollars (\$50,000,000)” with “Forty-Five Million Dollars (\$45,000,000)” therein.

(x) **Exhibit F** . Exhibit F of the Loan and Security Agreement is hereby amended by replacing “\$50,000,000” with “\$45,000,000” therein.

(xi) **Schedule 1.1A** Schedule 1.1A (Commitments) of the Loan and Security Agreement is hereby amended and restated in its entirety as set forth in Addendum I hereto.

(b) **References Within Loan and Security Agreement** . Each reference in the Loan and Security Agreement to “this Agreement” and the words “hereof,” “herein,” “hereunder,” or words of like import, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment.

**SECTION 3** **Conditions of Effectiveness**. The effectiveness of Section 2 of this Amendment shall be subject to the satisfaction of each of the following conditions precedent:

(a) **Fees and Expenses** . The Borrower shall have paid (i) all attorney fees and other costs and expenses then due in accordance with Section 5(e), and (ii) all other fees, costs and expenses, if any, due and payable as of the Third Amendment Effective Date under the Loan and Security Agreement.

(b) **This Amendment** . Agent shall have received this Amendment, executed by Agent, the Lender and the Borrower.

(c) **Representations and Warranties; No Default** . On the Third Amendment Effective Date, after giving effect to the amendment of the Loan and Security Agreement contemplated hereby:

(i) The representations and warranties contained in Section 4 shall be true and correct in all material respects on and as of the Third Amendment Effective Date as though made on and as of such date; and

- (ii) There exist no Events of Default or events that with the passage of time would result in an Event of Default.

**SECTION 4 Representations and Warranties** . To induce Agent and Lender to enter into this Amendment, the Borrower hereby confirms, as of the date hereof, (a) that the representations and warranties made by it in Section 5 of the Loan and Security Agreement and in the other Loan Documents are true and correct in all material respects; *provided, however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; (b) that there has not been and there does not exist a Material Adverse Effect; and (c) that the information included in the Perfection Certificate delivered to Agent on the Effective Date remains true and correct. For the purposes of this Section 4, any representations and warranties which relate solely to an earlier date shall not be deemed confirmed and restated as of the date hereof (provided that such representations and warranties shall be true, correct and complete in all material respects as of such earlier date).

**SECTION 5 Miscellaneous.**

(a) **Loan Documents Otherwise Not Affected; Reaffirmation** . Except as expressly amended pursuant hereto or referenced herein, the Loan and Security Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. The Lender's and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. The Borrower hereby reaffirms the grant of security under Section 3.1 of the Loan and Security Agreement and hereby reaffirms that such grant of security in the Collateral secures all Secured Obligations under the Loan and Security Agreement, including without limitation any Term Loans funded on or after the Third Amendment Effective Date, as of the date hereof.

(b) **Conditions** . For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the Third Amendment Effective Date specifying its objection thereto.

(c) **Release** . In consideration of the agreements of Agent and each Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lenders and all such other persons being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan and Security Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above.

(d) **No Reliance** . The Borrower hereby acknowledges and confirms to Agent and the Lender that the Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses** . The Borrower agrees to pay to Agent on the Third Amendment Effective Date the out-of-pocket costs and expenses of Agent and the Lenders party hereto, and the fees and disbursements of counsel to Agent and the Lenders party hereto (including allocated costs of internal counsel), in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the Third Amendment Effective Date or after such date.

(f) **Binding Effect** . This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law**. This Amendment, the Loan and Security Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments** . This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions**. Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts** . This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

(k) **Loan Documents** . This Amendment shall constitute a Loan Document.

*[Balance of Page Intentionally Left Blank; Signature Pages Follow]*



**TNK THERAPEUTICS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President & CEO

**SCINTILLA PHARMACEUTICALS, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President & CEO

**LA CELL, INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

**SINIWEST HOLDING CORP.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

**LEVENA BIOPHARMA US INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President & CEO

**BIOSERV CORPORATION**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

**SCILEX PHARMACEUTICALS INC.**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: Chief Executive Officer

**SNAN HOLDCO LLC**

Signature: /s/ Henry Ji, Ph.D.

Print Name: Henry Ji, Ph.D.

Title: President

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*[Signature Page to Third Amendment to Loan and Security Agreement (Sorrento/Hercules)]*



**AGENT:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

**LENDER:**

**HERCULES CAPITAL, INC.**

Signature: /s/ Jennifer Choe

Print Name: Jennifer Choe

Title: Assistant General Counsel

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*[Signature Page to Third Amendment to Loan and Security Agreement (Sorrento/Hercules)]*

**Addendum I**

**SCHEDULE 1.1A**

**COMMITMENTS**

<b>LENDER</b>	<b>TRANCHE</b>	<b>TERM COMMITMENT</b>
Hercules Capital, Inc.	Tranche I	\$50,000,000
Hercules Capital, Inc.	Tranche III	\$25,000,000*
<b>TOTAL COMMITMENTS</b>		<b>\$75,000,000*</b>

\* Funding of Tranche III subject to approval by Lender's investment committee in its sole and unfettered discretion. Pursuant to the Third Amendment to Loan and Security Agreement, all Tranche II commitments have terminated.

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**CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO  
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Henry Ji, certify that:

1. I have reviewed this Amendment No. 2 to Annual Report on Form 10-K/A of Sorrento Therapeutics, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: April 28, 2017

By: /s/ Henry Ji  
Henry Ji  
President and Chief Executive Officer  
*(Principal Executive Officer)*

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**CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO  
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kevin Herde, certify that:

1. I have reviewed this Amendment No. 2 to Annual Report on Form 10-K/A of Sorrento Therapeutics, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: April 28, 2017

By: /s/ Kevin Herde  
Kevin Herde  
Chief Financial Officer  
*(Principal Financial Officer)*

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