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

FORM 10-K

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

For the year ended December 31, 2017

OR

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



SELLAS Life Sciences Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation)

Commission File
Number: 001-33958

20-8099512
(I.R.S. Employer Identification No.)

315 Madison Avenue, 4th Floor, New York, NY 10017
(917) 438-4353

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

<u>Title of Each Class</u>	<u>Name of Exchange on Which Registered</u>
Common Stock, \$0.0001 Par Value per Share	The Nasdaq Capital Market

Securities registered pursuant to Section 12(b) of the Exchange 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 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 such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the 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. 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 (§ 232.405 of this chapter) during the preceding 12 months (or for any such shorter time that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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:

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>
		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 Exchange Act): Yes No

Based on the closing price of the registrant’s common stock as reported on the Nasdaq Capital Market, the aggregate market value of the registrant’s common stock held by non-affiliates on June 30, 2017 (the last business day of the registrant’s most recently completed second fiscal quarter) was approximately \$21,640,272.

As of April 6, 2018, the registrant had outstanding 6,572,542 shares of common stock, \$0.0001 par value per share, exclusive of treasury shares.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required in Part III of this Annual Report on Form 10-K is incorporated from the registrant’s Proxy Statement for its 2018 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K, provided that if such Proxy Statement is not filed within such period, such information will be included in an amendment to this Form 10-K to be filed within such 120-day period.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

Some of the information contained in this annual report on Form 10-K may include forward-looking statements that reflect our current views with respect to our development programs, business strategy, business plan, financial performance and other future events. These statements include forward-looking statements both with respect to us, specifically, and our industry, in general. Such forward-looking statements include the words “expect,” “intend,” “plan,” “believe,” “project,” “estimate,” “may,” “should,” “anticipate,” “will” and similar statements of a future or forward-looking nature identify forward-looking statements.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Forward-looking statements are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. There are or will be important factors that could cause actual results to differ materially from those indicated in these statements. These factors include, but are not limited to, those factors set forth in the sections entitled “Risk Factors,” “Legal Proceedings,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” in this annual report on Form 10-K, which you should review carefully. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as required by law.

[Table of Contents](#)

SELLAS LIFE SCIENCES GROUP, INC.
ANNUAL REPORT ON FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2017
TABLE OF CONTENTS

Part No.	Item No.	Description	Page No.
I	1	Business	1
	1A	Risk Factors	38
	1B	Unresolved Staff Comments	84
	2	Properties	84
	3	Legal Proceedings	84
	4	Mine Safety Disclosures	86
II	5	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	87
	6	Selected Financial Data	88
	7	Management's Discussion and Analysis of Financial Condition and Results of Operations	89
	7A	Quantitative and Qualitative Disclosures About Market Risk	101
II	8	Financial Statements and Supplementary Data	102
	9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosures	144
	9A	Controls and Procedures	144
	9B	Other Information	145
III	10	Directors, Executive Officers and Corporate Governance	145
	11	Executive Compensation	145
	12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	145
	13	Certain Relationships and Related Transactions, and Director Independence	145
	14	Principal Accountant Fees and Services	145
IV	15	Exhibits	146
	16	Form 10-K Summary	154
		SIGNATURES	155

The names "SELLAS Life Sciences Group, Inc.," "SELLAS," the SELLAS logo, and other trademarks or service marks of SELLAS Life Sciences Group, Inc. appearing in this annual report on Form 10-K are the property of SELLAS Life Sciences Group, Inc. Other trademarks, service marks or trade names appearing in this prospectus are the property of their respective owners. We do not intend the use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of or by either, of these other companies.

Unless the context otherwise indicates, references in these notes to the "Company," "we," "us" or "our" refer to SELLAS Life Sciences Group, Inc. and its wholly owned subsidiaries.

PART I

ITEM 1. BUSINESS

Merger of Galena Biopharma, Inc. and SELLAS Life Sciences Group Ltd.

On December 29, 2017, we completed the business combination with the privately held Bermuda exempted company, Sellas Life Sciences Group Ltd., or Private SELLAS, in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of August 7, 2017 and amended November 5, 2017, or the Merger Agreement, by and among our company, Sellas Intermediate Holdings I, Inc., Sellas Intermediate Holdings II, Inc., Galena Bermuda Merger Sub, Ltd., and Private SELLAS. We refer to this business combination throughout this annual report on Form 10-K as the Merger. As a result of the Merger, our business is now substantially comprised of the business of Private Sellas, and although we are considered the legal acquiror of Private SELLAS, for accounting purposes, Private SELLAS is considered to have acquired our company in the Merger. Consequently, the Merger is accounted for as a reverse acquisition.

Immediately prior to the Merger, we effected a 1-for-30 reverse stock split of our outstanding common stock. Under the terms of the Merger Agreement, we issued shares of our common stock to Private SELLAS' securityholders at an exchange ratio of 43.9972 shares of our common stock in exchange for each common share of Private SELLAS outstanding immediately prior to the Merger. We also assumed all of the restricted stock units, or RSUs issued and outstanding under the Private SELLAS Stock Incentive Plan #1, and all of the issued and outstanding warrants of Private SELLAS. Accordingly, such RSUs will now be settled in, and such warrants now are exercisable for, shares of our common stock. Accordingly, immediately after the Merger, there were approximately 5,766,891 shares of our common stock outstanding, with the former Private SELLAS securityholders owning approximately 67.5% of our fully diluted common stock, and our pre-Merger securityholders owning the remaining approximately 32.5%.

Upon completion of the Merger, we changed our name from "Galena Biopharma, Inc." to "SELLAS Life Sciences Group, Inc.", our common stock began trading on The Nasdaq Capital Market under a new ticker symbol "SLS" on January 2, 2018 and our financial statements became those of Private SELLAS.

As used in this annual report on Form 10-K, the words "we," "us," "our," the "Company," and "SELLAS" refer to SELLAS Life Sciences Group, Inc. and its consolidated subsidiaries following completion of the Merger.

Overview

We are a clinical-stage biopharmaceutical company focused on novel cancer immunotherapeutics for a broad range of cancer indications. Our lead product candidate, galinpepimut-S, or GPS, is a cancer immunotherapeutic agent licensed from Memorial Sloan Kettering Cancer Center, or MSK, that targets the Wilms tumor 1, or WT1, protein, which is present in 20 or more cancer types. Based on its mechanism of action as a directly immunizing agent, GPS has the potential as a monotherapy or in combination with other immunotherapeutic agents to address a broad spectrum of hematologic, or blood, cancers and solid tumor indications. Phase 2 clinical trials for GPS have been completed and we have planned Phase 3 clinical trials (pending funding availability) for two indications, acute myeloid leukemia, or AML, and malignant pleural mesothelioma, or MPM. GPS is also in development as a potential treatment for multiple myeloma, or MM, and ovarian cancer. We plan to study GPS in up to four additional indications: as a combination therapy in small cell lung cancer, colorectal cancer, triple-negative breast cancer; and, as a monotherapy in chronic myelogenous leukemia, or CML. We received Orphan Drug Product Designations from the U.S. Food and Drug Administration, or FDA as well as Orphan Medicinal Product Designations from the European Medicines Agency, or EMA, for GPS in AML and MPM, as well as Fast Track Designation for AML and MPM from the FDA.

[Table of Contents](#)

Our pipeline also includes the legacy development programs of our pre-Merger company, including novel cancer immunotherapy programs for NeuVax™ (nelipepimut-S; a vaccine against the E75 peptide derived from the human epidermal growth factor 2 -or HER2- protein), GALE-301 (a vaccine against the E39 peptide derived from the folate binding protein, or FBP) and GALE-302 (a vaccine against the J65 peptide derived from FBP) and GALE-401 (a controlled release version of the approved drug anagrelide). NeuVax is currently in multiple investigator-sponsored Phase 2 clinical trials in breast cancer, including a prospective, randomized, single-blinded, controlled Phase 2b independent investigator-sponsored clinical trial of trastuzumab (Herceptin®) +/- NeuVax in HER2 1+/2+ breast cancer patients in the adjuvant setting to prevent recurrences. On April 2, 2018, we announced that a pre-specified interim analysis, conducted by an independent Data Safety Monitoring Board, or DSMB, of the efficacy and safety data for the study demonstrated a clinically meaningful difference in median disease-free survival, or DFS, in favor of the active arm (NeuVax + Herceptin), a primary endpoint of the study. Based on these results, and the DSMB's recommendation, we plan to expeditiously seek regulatory guidance by the FDA for further development of the combination of NeuVax + Herceptin in Triple Negative Breast Cancer, or TNBC, considering the statistically significant benefit of the combination therapy seen in this population with large unmet medical need.

GALE-301 and GALE-302 have completed early stage trials in ovarian, endometrial and breast cancers. GALE-401 is being developed for the treatment of elevated platelets in patients with myeloproliferative neoplasms, or MPNs, and a completed Phase 2 clinical trial in patients with essential thrombocythemia, or ET for this clinical candidate. Since the closing of the Merger, management has been evaluating GALE-301, GALE-302, and GALE-401 for potential internal development, strategic partnership, or other types of product rationalizations.

Our Strategy

We seek to use our expertise and understanding of cancer immunotherapy and general cancer therapeutic product development to develop novel products that have the potential to transform the treatment of cancer patients. The key components of our strategy are as follows:

- ***Continue to rapidly advance our first-in-class cancer immunotherapy product candidates and other new products through clinical development.***
We intend to continue to execute a focused clinical development plan that takes our product candidates through approval by regulatory authorities. This includes developing GPS as both a monotherapy or in combination, in addition to exploring opportunities for the other product candidates in our pipeline. The entire GPS clinical program currently targets up to eight tumor types, namely AML, MPM, MM, ovarian cancer, small cell lung cancer, colorectal cancer, triple negative breast cancer, and CML. We may pursue additional development of GPS for other indications, both as a monotherapy or in combination with other therapeutic agents.

GPS monotherapy : GPS has completed Phase 2 clinical trials and has Phase 3 clinical trials planned (pending funding availability) for AML and MPM. There is also an ongoing Phase 2 clinical trial of GPS for MM as monotherapy. We also have plans to pursue additional clinical development programs for GPS as a monotherapy, including in chronic myelogenous leukemia, or CML, and AML treated with hypomethylators.

GPS combination therapy : GPS has an ongoing Phase 1/2 clinical trial for ovarian cancer, in combination with nivolumab (Opdivo®) (the clinical trial is independently sponsored by MSK). We plan to test GPS in combination with other therapeutic agents for various solid and hematologic cancers. Our leading combination clinical program will be in collaboration with a Merck & Co., Inc., Kenilworth, N.J., USA subsidiary (known as MSD outside the United States and Canada), or Merck subsidiary. The purpose of the trials is to determine if the administration of GPS in combination with the PD1 blocker pembrolizumab (Keytruda®) has the potential to demonstrate clinical activity in the presence of macroscopic disease, where monotherapy with either agent would have a more limited effect.
- ***Utilize rare disease development pathways at the FDA and comparable foreign regulatory agencies to accelerate progression to late-stage development and early approval.*** A component of our strategy is to focus on rare types of cancers where our cancer immunotherapy product candidates may produce clinical benefit and where we can take advantage of regulatory programs intended to expedite drug development in these types of rare cancers. We received Orphan Drug Product Designation from the FDA as well as Orphan Medicinal Product Designation from the EMA for GPS in AML and MPM, as well as Fast Track Designation from the FDA for AML, MPM, and NeuVax. We plan to apply for Orphan Drug Designation, Fast Track Designation, Breakthrough Therapy Designation and Priority Review from the FDA as well as Orphan Medicinal Product Designation, Priority Medicines Designations, and Conditional Authorizations from the EMA for any given indication, if applicable when pertinent data becomes available, to potentially reduce clinical trial expense and increase speed to commercialization.

[Table of Contents](#)

- **Enter into collaboration and license agreements with other biotechnology and pharmaceutical companies to develop our current product candidates and other future product candidates.** WE seek out collaborations for additional opportunities and development of programs in our pipeline that require larger clinical trials or extensive commercial infrastructure. Specifically, we plan to advance the development of NeuVax through a partnership or other strategic collaboration. We are also evaluating licensing and other strategic options for GALE-301, GALE-302 and GALE-401.
- **Selectively build focused commercial capabilities and establish commercial collaborations to maximize the value of our clinical development pipeline.** We have not yet defined our sales, marketing or product distribution strategy for GPS or any future product candidates. Our future commercial strategy may include the use of strategic alliances, distributors, a contract sales force, or the establishment of our own commercial and specialty sales force to maximize the value of our pipeline.

The chart below summarizes the current status of our clinical development pipeline:

PROGRAM	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
Galinpepimut-S				
Acute Myeloid Leukemia (AML)**	Phase 3 Protocol reviewed/approved by FDA; > 100 sites pre-screened			Phase 3 PLANNED* H2 '18
Malignant Plural Mesothelioma (MPM)**	Phase 3 Protocol reviewed/approved by FDA			Phase 3 PLANNED*
Multiple Myeloma (MM)	Phase 2 Study – ONGOING			
Ovarian Cancer (combo w/ Nivolumab) –BMS	Phase 1/2 Study – ONGOING			
Immune Combo (w/ Pembrolizumab) –MRK	Phase 2a POC Study – PLANNED* Q3 '18			
Chronic Myelogenous Leukemia (CML)	Phase 2 Study – PLANNED			
AML (w/ Hypomethylating agent)	Phase 2 Study – PLANNED			
Multiple Myeloma (randomized)	Phase 2b Study – PLANNED			
In-Licensed WT1 Delivery Technology				
WT1-Lm Product –ADXS	IND-enabling/pre-clinical studies - ONGOING			
NeuVax™(nelipepimut-S) – Breast Cancer Development				
Combo w/ Trastuzumab (HER2 1+/2+)***	Phase 2b Study – ONGOING			
GALE 301/302 – Folate Binding Protein				
Ovarian****	Phase 1/2 Study			
GALE 401 – Anagrelide Controlled Release				
Essential Thrombocythemia****	Phase 2 Study			

* Pending Funding

** Granted Orphan Drug Product Designation from FDA and Orphan Medicinal Product Designation from EMA and Fast Track status from FDA

*** Granted Fast Track status from FDA

**** Since the closing of the Merger, management has been evaluating GALE-301, GALE-302, and GALE-401 for potential internal development, strategic partnership, or other types of product rationalizations

The Cancer Immunotherapy Industry

Overview

The principle behind cancer immunotherapy involves stimulating a person's own immune system to selectively attack cancer cells while keeping normal cells unaffected or delivering certain immune system components in order to inhibit the spread of cancer. Cancer immunotherapy drugs now constitute a new mode of cancer treatment, alongside more established options such as surgery, chemotherapy, targeted therapy and radiation therapy. A July 2016 report by Kelly Scientific Publications estimates that immunotherapies may eventually be used in as many as 60% of cases of advanced cancer; further, based on a recent Allied Market Research report on the estimated entire market value of oncology drugs in 2020, cancer immunotherapies could represent up to 71% of that total value. Either in mono or in combination therapies, immunotherapies may produce long-term remissions or even operational "cures" for cancers that have been uniformly fatal until recently. Thus, cancer immunotherapy is an important and rapidly emerging field, which has led to exciting new clinical research studies and garnered the attention of investors, biotechnology and pharmaceutical companies, regulatory agencies, payors and hospital systems, cancer patients and their families and the general public at large.

Market

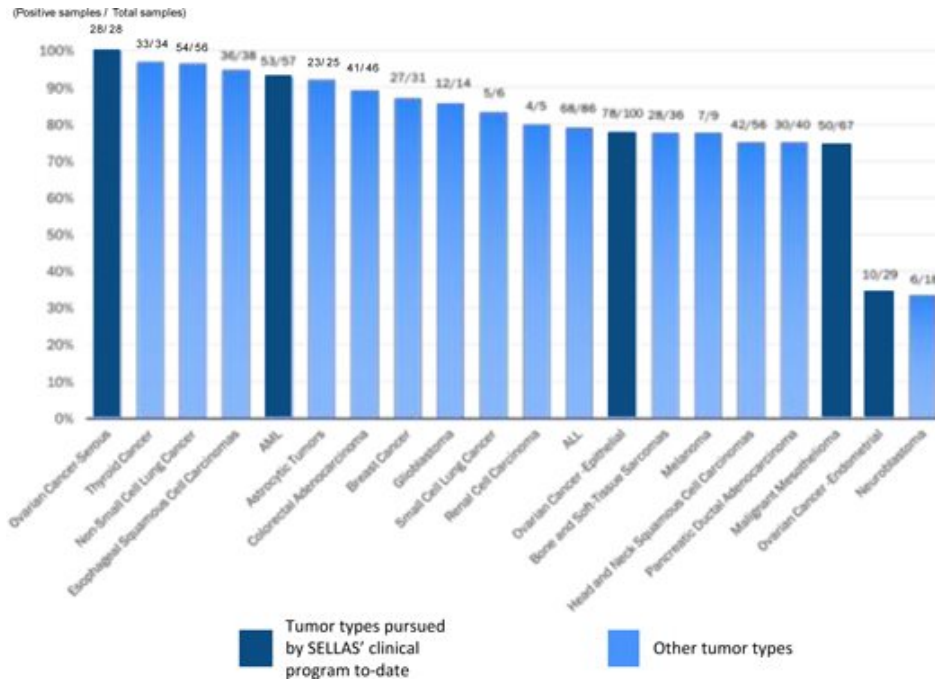
The global market for cancer drugs (including immunotherapy drugs) is expected to reach \$161.3 billion by end of 2021, growing at a compound annual growth rate, or CAGR of around 7.4% between 2016 and 2021 (according to a December 2016 report by Zion Market Research). According to a September 2016 report by MarketsandMarkets, the global cancer immunotherapy market is expected to reach \$119.4 billion by 2021 from \$61.97 billion in 2016 at an estimated CAGR of 14.0%. We estimate that by 2021, 74% of the oncology market worldwide will be supported by usage of cancer immunotherapies.

The first category of immunotherapies, immune synapse modulators (which includes checkpoint inhibitors and immune synapse co-stimulators), is likely to reach and exceed 90% of the immunotherapy market in the coming years, which leaves approximately 10% for the other three major categories, which include peptide cancer active immunizers such as our product candidate, GPS.

GPS targets malignancies and tumors characterized by an overexpression of the WT1 protein. The WT1 protein is one of the most widely expressed cancer proteins in multiple malignancies. A 2009 pilot project regarding the prioritization of cancer antigens conducted by the National Cancer Institute, or NCI, a division of the National Institutes of Health, or NIH, ranked the WT1 protein as a top priority for immunotherapy. WT1 is a protein that resides in the cell's nucleus and participates in the process of cancer formation and progression. As such, it is classified as an "oncogene." WT1 plays a key role in the development of the kidneys in fetal life, but then almost disappears from normal organs and tissues. In a wide variety of cancers (20 or more cancer types), WT1 becomes detectable again in the cells of these cancers. WT1 appears in large amounts (*i.e.*, becomes "overexpressed") in numerous hematological malignancies, including AML, MM and chronic myeloid leukemia, as well as in many solid malignancies such as MPM, gastrointestinal cancers (such as colorectal cancer), glioblastoma multiforme, triple-negative breast cancer, ovarian cancer and small-cell lung cancer. Overall, WT1 is expressed in at least 50% of tumor pathology specimens in 20 or more cancer types. The following figure shows the ratio of samples testing positive for WT1 to those testing negative for WT1 in a number of different malignancies.

WT1 EXPRESSION FREQUENCY ACROSS VARIOUS CANCERS

(Positive samples / Total samples)



Data sampling overview from multiple studies in human tumor samples or cancer cell lines

Our other cancer immunotherapy product, NeuVax (nelipepimut-S), utilizes a targeted approach based upon two key areas: preventing secondary recurrence of human epidermal growth factor receptor, or HER2, positive breast cancer because the number of breast cancer survivors continues to grow; and, primary prevention intended to prevent ductal carcinoma *in situ*, or DCIS, from becoming invasive breast cancer. Once a patient's tumor becomes metastatic, the outcome is often fatal, making the prevention of recurrence a potentially critical component of overall patient care. Our secondary recurrence programs for NeuVax primarily target patients in the adjuvant, or after-surgery setting who have relatively healthy immune systems but may still have residual disease. Minimal residual disease, or micrometastasis, that are undetectable by current radiographic scanning technologies, can result in breast cancer recurrence.

[Table of Contents](#)

While GPS and NeuVax are both anti-cancer vaccines, they have some distinguishing features. GPS is tetravalent and NeuVax is monovalent. GPS is a direct immunogen emulsified into the clinically safe adjuvant Montanide, and administered subcutaneously after priming the immune system with recombinant human granulocyte macrophage-colony stimulating factor, or GM-CSF, Sargramostim. NeuVax, on the other hand, uses an immunodominant HER2 peptide combined with GM-CSF as the immune adjuvant, and is administered intradermally. Both GPS and NeuVax, however, work by harnessing the patient's own immune system to seek out and attack any residual cancer cells. We believe using peptide immunogens has many potential clinical advantages, including a favorable safety profile, because these therapies may lack the toxicities typical of most cancer therapies. Peptide immunogens also have the potential to induce immunologic memory and provide long-lasting protection with convenient modes of delivery.

Galinpepimut-S

Overview

GPS is a WT1-targeting peptide-based cancer immunotherapeutic being developed as a monotherapy and in combination with other therapeutic agents to treat different types of cancers that result from uninhibited tumor cell growth.

Cancer immunotherapy is an approach to cancer treatment that harnesses the body's natural immune system response to fight and/or prevent such tumor growth. An essential feature of the immune system is its ability to recognize foreign, or non-self, threats, including cancerous growths, as distinct from normal, or self, cells. Despite originating from normal cells, tumor cells can be recognized as non-self because of their capacity to elicit the production of tumor antigens. These antigens may be released in the interstitial tissues and, eventually, the bloodstream or remain on the surface of cognate cancer cells. Such tumor-associated antigens, or TAAs, have been identified in most human cancers. The WT1 protein is one of the most widely expressed TAAs in multiple malignances.

The immune system is a network of tissues, cells, and signaling molecules that work to protect the body by recognizing and attacking foreign cells, including cancer cells. Several different types of cells are important for the development and maintenance of an immune response against cancer. The most crucial types of cells are antigen-presenting cells, or APCs, and lymphocytes. APCs include various subtypes, such as dendritic cells, monocytes and macrophages. Once a patient is exposed to a TAA (either by the presence of cancer itself or through active immunization through a vaccine type immunotherapeutic), this antigen gets recognized by the APC and becomes "processed" through digestion into smaller fragments within the APC. Subsequently, the APC "communicates" with a specific type of lymphocytes called T-cells. Inactive T-cells search for TAAs by transiently binding to antigens presented by major histocompatibility complexes, or MHCs, on the APCs. Notably, there is great variability in the expression of different subtypes of MHCs in the human population. The MHC system expresses the so-called human leukocyte antigens, or HLAs, and there are dozens of subclasses that determine the vigor and duration of any given T-cell response to a cancer among different patients. Consequently, active immunizers that work across many HLA types, such as GPS, are predicted to be more efficacious across larger segments of patient populations as compared to agents that act in the context of only one or few HLA types.

T-cells themselves also come in many variants. CD8 cells recognize the processed TAA fragment as foreign and respond. The CD8 cells also develop properties that can directly kill the TAA-expressing cancer cell by becoming "cytotoxic" CD8 cells. The CD8 cells, as well as the APCs, also activate CD4 cells, which are very important for the development of immunologic memory. Immunologic memory is developed when a host keeps a long-term trace of the TAA associated with the cancer and is a desirable result, as it allows the host to continue attacking the TAA associated with the cancer. Therefore, activation of CD4 cells helps avoid or mitigate immune "tolerance." Immune tolerance is an undesirable result, as it dampens the host's immune response against the cancer. This cascade of events is collectively called "cellular immunity" and is very important for anti-cancer activity of immunotherapeutic compounds such as GPS. Of note, once T-cells are activated, another class of lymphocytes, called B-cells, are also secondarily activated. B-cells are responsible for making antibodies against TAAs. These antibodies become expressed on the surface of the B-cells and are eventually secreted as soluble proteins in tissue fluids and blood. Such anti-cancer antibodies can be detected and have variable degree of activity against the cancer itself. This type of immunity is called "humoral immunity" and complements the actions and effects of the cellular immunity.

Key Features

GPS is a multi-peptide product that we have exclusively licensed from MSK, which has been modified to enhance the degree and duration of the immune response against the WT1 protein. The modification is based on the fact that two of the four peptides in the peptide mixture comprising GPS are deliberately mutated in a single amino acid residue. These mutated peptides are recognized by the immune system as non-self entities and are therefore less likely to induce immune tolerance. After administration of these mutated peptides, the patients become immunized against the corresponding native versions of these peptides (which are expressed by the tumor cells), and thus, are able to cross-react against them, which concept is called the heteroclitic principle. The enhanced immunity and duration are largely independent of a patient's HLA type. GPS also elicits both CD4 and CD8 immune responses. As described above, CD8 cells are extremely important, as their activation by GPS would lead to direct cancer cell killing, or cytotoxicity, and eventual establishment of immunologic memory against a WT1-expressing cancer. This occurs by two mechanisms, conversion of some of the activated CD8 cells to CD8 memory cells, and activation of CD4 cells and eventual creation of CD4 terminal effective memory cells.

We are currently developing GPS for up to eight indications.

GPS monotherapy. GPS has completed Phase 2 clinical trials and has Phase 3 clinical trials planned (pending funding availability) for AML and MPM is also in various development phases as a potential treatment for MM and ovarian cancer. There is also an ongoing Phase 2 clinical trial of GPS for MM as monotherapy. We also have plans to pursue additional clinical development programs for GPS as a monotherapy, including in CML and AML treated with hypomethylators.

GPS combination therapy. In October 2017, we announced a clinical trial collaboration and supply agreement through a Merck subsidiary to conduct a combination clinical trial (using GPS along with the PD1 blocker pembrolizumab (Keytruda)) targeting up to five cancer types, namely colorectal cancer, small cell lung cancer, triple negative breast cancer, ovarian cancer and AML treated with hypomethylators. We are preparing to start this clinical trial pending funding availability. Separately, a clinical trial in ovarian cancer of GPS in combination with nivolumab (Opdivo) is being conducted as an independently-sponsored trial by MSK. Finally, we also have GPS delivery technology in preclinical development using licensed technology from Advaxis using a bacterial vector, Lm (which if successful, could lead to a second-generation product called WT1-Lm).

The following table summarizes the key features of GPS:

Key features of an Optimal Cancer Active Immunizer Therapeutic
Selecting the right target antigen and epitopes within that antigen

GPS Properties and Clinical Strategy

Four peptides and 25 epitopes selected optimally to ensure:

- optimal MHC complex presentation;
- specificity across different HLA types;
- production of both CD4 and CD8 activated cells; and
- the ability to apply the heteroclitic principle, as described above, to overcome tolerance.

[Table of Contents](#)

Key features of an Optimal Cancer Active Immunizer Therapeutic

Optimal T-cell engagement leading to cancer cell destruction

Overcoming the barriers of an adverse/immunosuppressive tumor micro-environment, or TME

Overcoming or mitigating immune tolerance

Addressing the broadest possible candidate patient population

Potential Key Differentiators

GPS' potential key differentiators as compared to other active immunization or vaccine-type approaches, as well as compared to immunotherapy approaches more generally, are as follows:

- heteroclitic peptides may offer increased immune response and less potential for tolerance;
- multivalent oligopeptide mixture potentially drives differentiated immunotherapeutic efficacy, targeting 25 key epitopes of WT1;
- potentially applicable to 20 or more cancer types worldwide and the vast majority of HLA types;
- CRem or minimal residual disease status (after initial tumor debulking with preceding standard therapy) is the preferred setting for GPS monotherapy;

GPS Properties and Clinical Strategy

Immune response data from the multiple myeloma clinical study of GPS in 12 evaluable patients that was presented at the Society of Hematologic Oncology Fifth Annual Meeting (Dr. Kohne et al.), showed 83.3% frequency of either CD8+ or CD4+ responses to an all-pool mixture of WT1-derived antigens after completion of the 12 vaccinations per the study protocol. This evidence of multi-epitope, broad cross-reactivity along the full-length of the WT1 protein, is suggestive of epitope spreading, as it emerged across epitopes against which the patients were not specifically immunized. These data strongly suggest stimulation of T-cells towards intracellular antigen fragments from GPS-induced destruction of tumor cells, which effect is a hallmark of an effective vaccine, e.g., that it is targeting the right (e.g., chosen by design) epitopes.

The GPS monotherapy clinical studies are in the setting of complete remission, or CRem, and minimal residual disease, whereby no bulky or measurable tumor deposits exist. This is typically seen after successful frontline therapy in select cancer types for which such debulking standard therapies exist (e.g., AML or MPM). In these settings, the TME is substantially absent. We are also pursuing combination therapy with checkpoint inhibitors in tumor settings whereby measurable disease exists, as contemporaneous checkpoint inhibition would abrogate the immunosuppressive effects of the TME.

Heteroclitic peptides are those in which mutations have been deliberately introduced in the amino acid sequence. The use of heteroclitic peptide in an active immunizer, such as GPS, increases immunogenicity without changes in the antigenicity profile, as well as strengthens MHC binding of the peptide to produce cytotoxic CD8 cells that continue to recognize the corresponding native peptide sequence. This is a key factor differentiating GPS from essentially all previously developed peptide vaccines, and applies a highly innovative technology platform, peptide heteroclicity, in a clinical late-stage cancer immunotherapeutic candidate product.

GPS has activity across multiple HLA types that could allow treatment of a vast majority of global patient populations harboring WT1-positive malignancies.

[Table of Contents](#)

- does not directly compete with current clinical standard of care therapies, but rather complements them in the maintenance setting;
- potential for combination approaches with other cancer immunotherapies, due to tolerable adverse event profile;
- anticipated cost-effective manufacturing; allogeneic, “off-the-shelf,” vialled subcutaneously administered drug that is not patient-specific; and
- positive Phase 2 clinical data on effectiveness (based on overall survival, or OS, in AML and progression-free survival, or PFS, in MM) with good tolerability and an innocuous safety profile.

Mechanism of Action

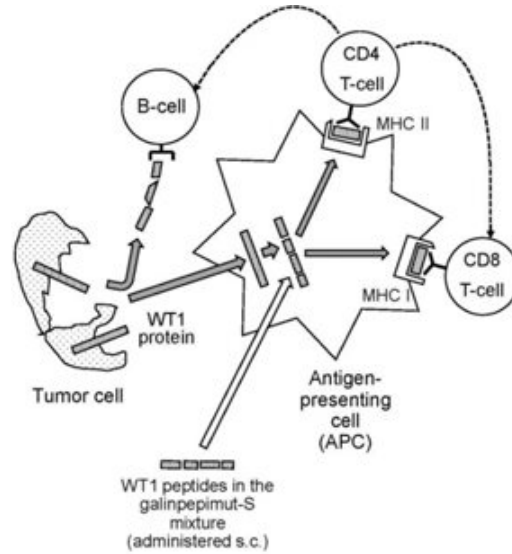
GPS has a mechanism of action that involves direct activation of the patient’s immune system specifically and solely against the WT1 protein. Typically, patients harboring WT1-positive malignancies have very few or no T-lymphocytes specifically reactive or responsive to, and therefore activated by, WT1. WT1 is a “self” antigen, against which the immune system is non-reactive, or said to be in a state of immune tolerance. Even if some patients have some innate T-cell responses naturally, these responses are weak and not adequate for any anti-cancer effect.

GPS is a WT1 peptide mixture. It cannot be administered to patients in a water-soluble form, and so it is given under the skin, or subcutaneously. If administered on its own, GPS would rapidly degrade and would not have the opportunity and the necessary time interval to activate the immune system. Therefore, GPS is mixed with Montanide, creating a dense emulsion. Additionally, prior to the administration of GPS, patients receive an adjuvant, GM-CSF to non-specifically stimulate and activate APCs in the vicinity of the subcutaneous injection of GPS.

After subcutaneous injection, the WT1 peptides within GPS disperse locally underneath the injection site and at local lymph nodes, and are ingested by APCs. Digested peptide fragments are then presented on the surface of APCs to CD8 and CD4 lymphocytes while simultaneously associated on the cell membrane with MHC/HLA molecules. This process activates the CD4 and CD8 cells and sensitizes them to the key 25 epitopes of WT1, thus initiating the process of short- and long-term T-cell-mediated immunity against WT1. CD8 cells then circulate around the lymphatic system and blood stream throughout the patient’s body targeting WT1-positive cancer cells. The stimulated CD8 cells transform into cytotoxic T-lymphocytes, or CTLs, which are able to attack and destroy specifically WT1-positive cancer cells. Each CTL typically destroys one WT1-positive cancer cell, but they have been shown to be able to kill up to 10 to 20 WT1-positive cancer cells. Further, CD4 cells are stimulated to produce WT1-specific, helper T-cells, which are able to in turn activate CTLs and B-cells. The B-cells “helped” by the helper T-cells produce antibodies to specific WT1 epitopes. The anti-cancer effect is considered to be a result of a combination of all of the above actions, as well as possible additional, less clear mechanisms involving other immune cell types (*e.g.* , natural killer cells). The principles behind the above described mechanism of action of GPS are well established for the class of peptide-based active immunizing therapies of the vaccine type.

[Table of Contents](#)

The following diagram illustrate GPS' mechanism of action:



Targeted Indications

GPS Monotherapy for Acute Myeloid Leukemia

AML is an aggressive and highly lethal blood cancer characterized by the rapid growth of abnormal white blood cells that build up in the bone marrow and interfere with the production of normal blood cells. Its symptoms include fatigue, shortness of breath, bruising and bleeding, and increased risk of infection. The cause of AML is unknown, and the disease is typically fatal within weeks or months if untreated. AML most commonly affects adults, and its incidence increases with age. Current treatments include chemotherapy, and some patients may receive a hematopoietic, or blood-forming, stem cell transplant, or HSCT. The goal of upfront therapy for AML is to achieve a state of CRem. CRem is defined per consensus criteria by the European Leukemia Net, whereby the hematologic and clinical features of the disease are no longer detected. In principle, an allogeneic HSCT is an immunotherapy used clinically and specifically in AML, which works in four stages:

- achievement of CRem with standard upfront therapy followed by additional very high-dose chemotherapy that completely destroys any remnant of the patient's blood forming cells, including any residual AML malignant cells;
- selection of a sufficiently genetically similar donor (usually one of the patient's close relatives), called a histocompatible donor;
- removal of blood-forming cells from the bloodstream of that donor; and
- infusion of these donor cells into the patient for eventual engraftment onto the patient's bone marrow and eventual creation of a completely re-instituted blood-forming system to sustain life and long-term leukemia-free status for the patient.

[Table of Contents](#)

Barring the successful completion of an allogeneic HSCT in AML, no therapies have been proven to accord any meaningful long-term benefit after patients achieve a CRem status. Without allogeneic HSCT, once the disease relapses, second-line therapies can be given, but these have very limited positive clinical impact to date and their benefit is transitory; this means that eventually essentially all AML patients who do not undergo an allogeneic HSCT succumb to AML or complications associated with it.

The overall treatment landscape for AML has remained static for decades, as numerous (at the time, novel) targeted and antiproliferative agents failed to yield meaningful long-term clinical benefits, including increments in survival.

The AML indication was chosen for first-in-human clinical studies of GPS for the following reasons:

- AML presents a clinical setting in which CRem status can be achieved with standard upfront therapy;
- the almost universal expression of WT1 in leukemic blasts, which are AML's malignant cells, as well as leukemic stem cells, or LSCs, cells that are or become extremely resistant to standard chemotherapy or targeted agent approaches and which can be realistically eradicated only with immunotherapy methods (including allogeneic HSCT). LSCs have been shown to be susceptible to targeting by cytotoxic T-cells (CD8 and CD4 cells) stimulated against leukemia-associated antigens and we predicted this would be the case for GPS;
- the fact that WT1 has been associated with the actual development of leukemia;
- the positive correlation between the level of expression of WT1 and the prognosis in AML;
- the fact that the level of expression of WT1 can be followed over time in patients during and after therapy, including immunotherapy, as a method of monitoring for minimal residual disease, or MRD;
- early evidence from mouse models that vaccination with peptides against select WT1 antigenic epitopes leads to detection of immune response;
- early evidence that human immunocytes sensitized ex-vivo to peptides contained in GPS were able to recognize naturally presented WT1 peptides on the surface of several leukemia cell lines;
- early anecdotal (at the time) clinical data showing antileukemic activity of WT1 monovalent vaccines in the Japanese population (albeit restricted to HLA-A*2401 type), as well as a dendritic cell vaccine in the Netherlands (independent of HLA haplotype);
- the high degree of unmet medical need in AML and the absence of an effective maintenance therapy over the decades after initial upfront induction until and immediately after achievement of CRem status, particularly in patients older than 60 years of age;
- a predictive assumption of very low to negligible degree of clinical toxicity with a WT1-targeted immunotherapy such as GPS, due to the fact that WT1 in normal, non-cancerous, tissues is both expressed at extremely low levels and limited in number of organs and tissues, but also due to the fact that WT1 fragments, or peptide epitopes, in normal cells are presented to host APCs in a different manner than are WT1 fragments produced in cancer cells; of note, WT1 expression in normal tissues of adults is limited to the podocyte layer of the glomerulus (kidney), Sertoli cells (testis), granulosa cells (ovary), decidual cells (uterus), mesothelial cells (peritoneum, pleura), mammary duct and lobule (breast), and blood-forming (hematopoietic) progenitor cells (CD34+ cells in the bone marrow); and
- the advent of modern immunotherapeutics in cancer and the promise of an innovative, off-the-shelf immunotherapy for AML, a disease that was associated with dearth of deep and sustained responses to checkpoint inhibitors.

Clinical Data—AML

In an initial pilot clinical trial in AML, a total of nine adult patients of all ages with de novo AML were treated with upfront standard chemotherapy and were able to achieve their first complete remission, or CRem1. Administration of GPS resulted in a median OS that was at least 35 months from the time of GPS administration. In this study, specifically for patients who were 60 yrs and older (n=5), median OS was at least 33 months from the time of GPS administration or approximately 43 months from the time of initial AML diagnosis. The mean time of follow-up was 30 months from the time of diagnosis at the time of this analysis for all patients. Of the eight patients tested for immunologic response, seven, or 87.5%, demonstrated a WT1-specific immune response.

In a subsequent Phase 2 clinical trial in AML, a total of 22 adult patients of all ages with de novo AML were treated with upfront standard chemotherapy and were able to achieve CRem1. Most patients also received one to four cycles of “consolidation” chemotherapy per standard AML treatment guidelines. GPS was then administered within three months from the completion of the consolidation chemotherapy regimen in up to 12 total doses: Six initial doses (priming immunization) followed by six additional “booster” immunizations over a total period of up to 15 months to qualifying patients (*i.e.*, patients who were clinically stable and did not show disease recurrence after the first six injections). This Phase 2 clinical trial met its primary endpoint of an actual OS rate of at least 34%, measured three years into the clinical trial (*i.e.*, percentage of patients alive after three years of follow-up). An actual OS rate of 47.4% was demonstrated at 3 years post-GPS treatment, exceeding historical published data of OS of 20% to 25% by 2.4- to 1.9-fold (or 240% to 190%), respectively.

GPS administration was also shown to improve OS in comparison to historical data in patients in CRem1. Administration of GPS resulted in a median OS that was poised to exceed 67.6 months from the time of initial AML diagnosis in patients of all ages, which represents a substantial improvement compared to best standard therapy. Only five of the 22 patients underwent allogeneic HSCT and an ad hoc statistical analysis failed to show a significant effect of the transplant upon OS (either in median survival times or survival rates at specific landmark time-points). GPS was well tolerated in this patient population, whose median age was 64 years old. Moreover, GPS elicited WT1-specific immune responses in 88% of patients, including CD4 and CD8 T-cell responses. Further, the heteroclitic principle was confirmed, in that immune responses were seen against the native version of the two mutated WT1 peptides within the GPS mixture. The results showed a trend in improved clinical outcomes in patients who mounted an immune response with GPS compared to those patients who did not. Importantly, a preplanned subgroup analysis for the cohort of 13 patients within the clinical trial who were 60 years of age or older demonstrated a median OS of 35.3 months from time of initial diagnosis. This is also a remarkably prolonged value, considering that comparable historical populations have a median OS ranging from 9.5 to 15.8 months from initial diagnosis, which represents a 2.25 to 3.75-fold improvement in OS as compared to these historical cohorts of broadly comparable patients.

An additional Phase 2 clinical trial of GPS was performed at the H. Lee Moffitt Cancer Center & Research Institute, or Moffitt. This Phase 2 trial included ten AML patients who had received first-line therapy for their disease, who then experienced relapse and were subsequently treated with second-line chemotherapy and achieved a second complete remission, or CRem2. This group of patients had a more advanced disease in comparison to those treated in the other Phase 2 clinical trials discussed above, and typically demonstrated a historical OS of less than ~8 months, even with post-CRem2 allogeneic HSCT. In the Moffitt trial, the efficacy of GPS (measured as median OS from the time of administration of a maintenance therapy to immediately after achievement of CRem2) was compared with that of “watchful waiting” in a cohort of 15 contemporaneously treated (but not matched by randomization) broadly comparable patients treated by the same clinical team at Moffitt. GPS administration resulted in a median OS of 16.3 months (495 days) compared to 5.4 months (165 days) from the time of achievement of CRem2. This was a statistically significant difference (P=0.0175). Two of 14 AML patients demonstrated relapse-free survival of more than one year. Both such patients were in CRem2 at time of GPS administration, with duration of their remission exceeding duration of their CRem1, strongly suggesting a potential benefit based on immune response mechanisms. GPS was well-tolerated in this clinical trial.

[Table of Contents](#)

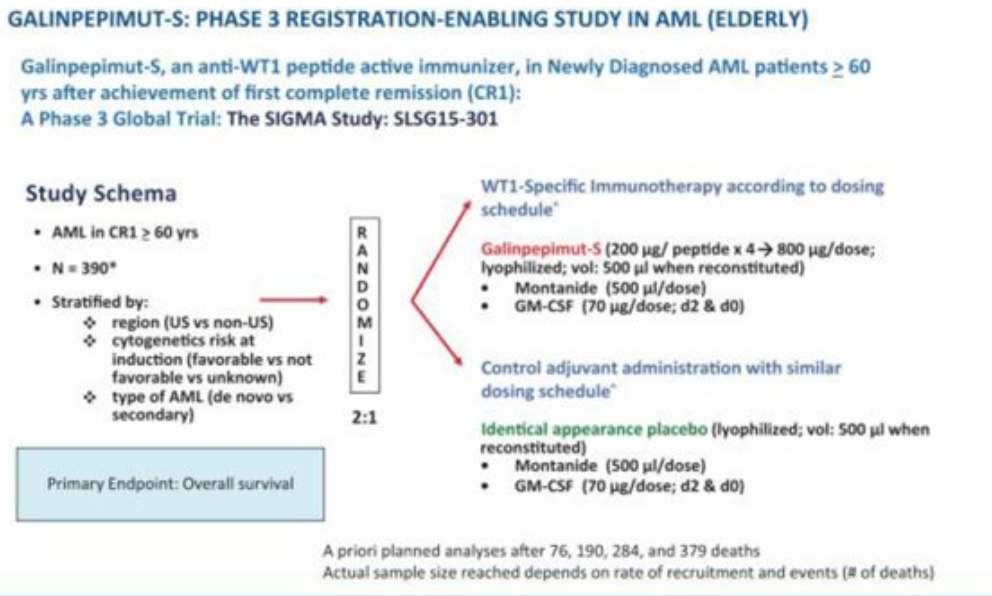
Planned Phase 3 Clinical Trial—AML

We are planning a Phase 3 clinical trial for GPS in AML patients 60 years of age or older who have achieved CRem1 following upfront chemotherapy and up to two cycles of post-remission consolidation chemotherapy, but who will not undergo allogeneic HSCT. This clinical trial has been planned, a principal investigator and the majority of site investigators have been identified and our operational partners for the execution of the trial are in the process of being identified. After several meetings and correspondence exchanges, the FDA has indicated that the agency has no further comments on the clinical trial design, protocol or statistical analysis plan. In addition, well-qualified members of an independent data monitoring committee have agreed to join the independent data monitoring committee for this clinical trial upon its establishment.

We currently plan to initiate this clinical trial, pending funding availability, in 2018.

The clinical trial is planned to include up to 180 centers in the United States, Canada, European Union, Eurasian Union, and other countries and an estimated total sample size of up to 390 patients. Randomization will be 2:1 (GPS:placebo) and on-trial treatment duration will be up to approximately 82 weeks (1.58 years). The primary endpoint of the clinical trial is OS, measured from the time of randomization (not initial diagnosis). No companion diagnostic will be used as AML universally expresses WT1. Randomization will be stratified by region (U.S. compared to non-U.S.), cytogenetic risk at diagnosis (favorable compared to not favorable compared to unknown), and type of AML (de novo compared to secondary). Patients will provide historical cytogenetic analysis results from initial diagnosis, before the start of their original chemotherapy treatment, to assess National Comprehensive Cancer Network genetic risk category. The clinical trial is currently powered to declare a positive result if GPS provides a 4-month OS advantage compared to placebo, namely increasing median OS from ~9 months in the control arm to ~13 months in the active, GPS-treated arm with an 1-sided α of 2.5%. Three interim analyses (IA1, IA2 and IA3) are planned in addition to a final analysis.

The following figure illustrates the AML Phase 3 GPS clinical trial schema described in the above paragraph.



* maximum for final analysis, unless futility or efficacy thresholds are met in Interim Analyses prior to FA

^ All agents are administered subcutaneously

GPS Monotherapy for Malignant Pleural Mesothelioma

MPM is an asbestos-related cancer that forms on the protective tissues that cover many of the internal organs. The most common area affected is the lining of the lungs and abdomen, though it can also form around the lining of the heart. Most cases are traced to job-related exposures to asbestos and it can take approximately 40 years between exposure and cancer formation. Symptoms may include shortness of breath, a swollen abdomen, chest wall pain, cough, feeling tired, and weight loss. MPM is generally resistant to radiation and chemotherapy, and long-term survival is rare, even in cases where aggressive upfront debulking multimodality therapy (*i.e.* , extirpative surgery, chemotherapy and in some cases radiotherapy, often described as “trimodality therapy” when used to treat MPM) are used.

Assuming absence of distant, systemic metastatic disease, MPM patients can initially present with a very difficult-to-treat malignancy. The location, geometry, and origin of the tumor in the pleura (the external lining of the lungs and inner lining of the chest cage) present significant challenges for local and regional disease control. Extensive and complex surgery is initially considered and attempted to be planned. Patients without distant disease are broadly divided in two subgroups: (a) those who are in an inoperable status and (b) those who are operable. Patients in the former subgroup may be inoperable for two reasons: first, because they may be medically unfit for an extensive “definitive” surgery, most commonly due to co-morbidities (contemporaneously active diseases unrelated to their cancer) or, secondly, for technical reasons (location and/or bulk of tumor); the latter group of patients is defined as harboring “unresectable” disease. In general, approximately 35% to 40% of patients with *a priori* unresectable disease can be converted to technically resectable/marginally resectable, particularly if surgical expertise is high, after several cycles of upfront chemotherapy. This preoperative chemotherapy is termed “neoadjuvant” therapy. After the patient’s tumor becomes technically resectable, they receive extirpative surgery, often followed by more chemotherapy and sometimes radiotherapy. On the other hand, patients who are *a priori* operable proceed immediately with definitive surgery, resulting in either R0 or R1 resections, the degree between the two being assessed by surgical pathology review, with R0 corresponding to resection for “curative intent”, and R1 corresponding to microscopic residual tumor despite complete eradication by visual inspection at the time of surgery. After surgery, this subgroup of patients receives several cycles of chemotherapy and sometimes radiotherapy. This is postoperative chemotherapy termed “adjuvant” therapy.

In essence, all MPM patients who receive successful upfront trimodality therapy (schema A: Upfront neoadjuvant chemotherapy, followed by definitive surgery, followed possible further additional chemotherapy and schema B: upfront definitive surgery followed by adjuvant chemotherapy) become free of residual detectable, macroscopic malignant deposits. Like AML patients who achieve CRem after upfront chemotherapy (in the absence of allogeneic HSCT), virtually all MPM patients will eventually relapse. Recurrent disease is unfortunately minimally responsive to second-line chemotherapy in MPM and typically these patients succumb to their disease or related complications within a few weeks to months after the emergence of clinically evident recurrent MPM. To date, there is no effective maintenance type of therapy to delay or prevent MPM relapse after initially successful upfront trimodality therapy. Typical median OS, even when following a fairly aggressive regimen when surgery is feasible, is between 12 and 16 months following diagnosis. Nonetheless, highly select patients who both undergo R0/R1 extensive surgery and complete a full course (6 cycles) of indicated chemotherapy (specifically those receiving the combination of pemetrexed with cisplatin, either in the neoadjuvant or adjuvant setting) can survive up to 21.0 to 24.8 months following initial diagnosis. These patients are typically younger, in excellent functional status, without co-morbidities and possibly having tumor-related factors related to better prognosis, such as intrinsically higher sensitivity of MPM cancer cells to chemotherapy-induced destruction.

Like AML, MPM represents a “model” type of solid tumor for testing the effects of GPS in clinical studies for the following reasons:

- MPM presents a clinical setting whereby minimal residual disease status can be achieved with standard upfront therapy;
- the universal expression of WT1 in MPM malignant cells; in fact, WT1 expression is an established pathognomonic criterion for the actual diagnosis of MPM and its differentiation of other chest malignancies, for example, pulmonary adenocarcinoma;
- the positive correlation between the level of expression of WT1 and prognosis in MPM;
- preliminary evidence that WT1 expression could be involved in the MPM tumorigenesis and malignant growth promotion;

[Table of Contents](#)

- early evidence that human APCs sensitized ex-vivo to peptides contained in the GPS mixture were able to recognize naturally presented WT1 peptides from MPM cell lysates;
- evidence that CD8 tumor-infiltrating lymphocytes predict favorable prognosis in MPM after resection (with the assumption that these CD8 cells are highly sensitized to tumor-associated antigens, including WT1);
- the high degree of unmet medical need in MPM and the absence of an effective maintenance therapy; indeed, despite extensive research efforts and recent promising, yet preliminary, results with checkpoint inhibitors in second or third line therapy of MPM patients, few options are available for the treatment of MPM in the maintenance setting after successful debulking with upfront trimodality therapy (with the vast majority being managed with “watchful waiting” until the disease’s inexorable relapse) and its prognosis remains very poor;
- a predictive assumption of very low to negligible degree of clinical toxicity with a WT1-targeted immunotherapy such as GPS, due to the fact that WT1 in normal, non-cancerous, tissues is both expressed at extremely low levels and limited in number of organs and tissues, but also due to the fact that WT1 fragments, or peptide epitopes, in normal cells are presented to host APCs in a different manner than are WT1 fragments produced in cancer cells; and
- an initial preliminary clinical efficacy “signal” from the Phase 2 clinical trial of GPS at MSK in patients with MPM.

Clinical Data—MPM

A randomized, double-blind, placebo-controlled Phase 2 clinical trial in MPM patients enrolled a total of 41 patients at MSK and M.D. Anderson Cancer Center. According to the Phase 2 MPM clinical trial data of GPS presented at the 2016 International Mesothelioma Interest Group and the 2016 Annual Meeting of the American Society of Clinical Oncology, as of May 2016, based on an initial analysis of 40 patients who were eligible at the time with a median follow-up of 16.3 months, a median OS of 24.8 months was recorded for GPS-treated MPM patients, compared to a median OS of 16.6 months for patients in the control arm, with a hazard ratio, or HR, of 0.51 in favor of GPS based on an initial analysis of 40 patients who were eligible at the time. Patients with an R0 tumor resection and subsequent treatment with GPS showed a significant survival benefit compared to those who received a placebo, with a median OS of 39.3 months compared to 24.8 months (HR: 0.415) in favor of GPS; this was a statistically significant difference ($P < 0.05$). In a subsequent analysis of these endpoints for the entire cohort ($n=41$) in August 2016, with a median follow-up of 17.2 months, a median OS of 22.8 months was observed for GPS-treated MPM patients, compared to a median OS of 18.3 months for patients in the control arm, with an HR of 0.54 in favor of GPS. Furthermore, in the datasets from both of these analyses, GPS was shown to induce WT1-specific CD8 and CD4 T-cell activation. GPS administration in the 19 MPM patients in the active arm of the aforementioned study was commonly associated with mild (grade 1 and 2) and self-limited injection site reactions. Clinically significant severe adverse events did not occur.

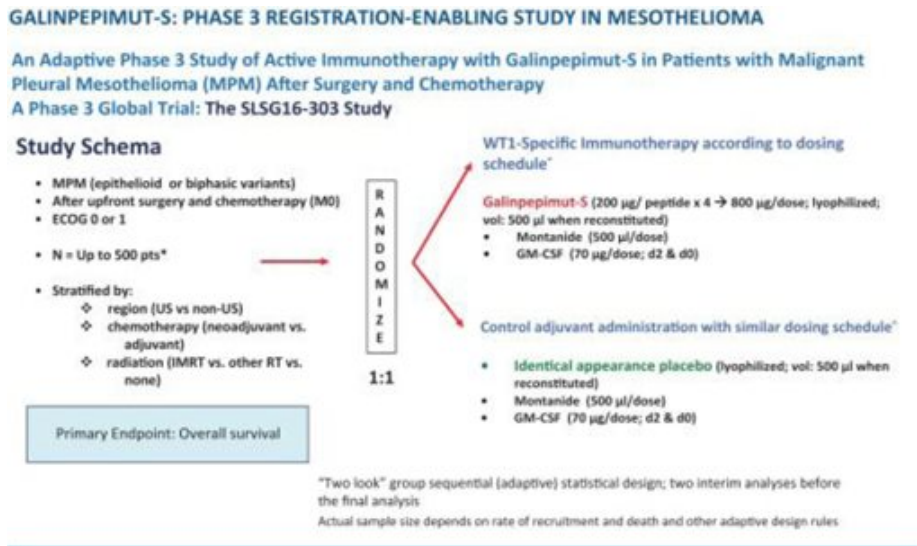
[Table of Contents](#)

Planned Phase 3 Clinical Trial—MPM

We have planned a Phase 3 clinical trial in MPM, pending funding availability. The FDA has reviewed the clinical trial design in previous meetings and, following a formal end-of-phase 2 meeting, has indicated that the agency has no further comments on the clinical trial design, protocol or statistical analysis plan. We are currently evaluating the best strategy to develop GPS in this indication.

The planned Phase 3 clinical trial may include up to 120 centers in the United States, European Union, and other countries and an estimated total sample size ranging from 120 to 500 patients. The sample size is variable due to the Bayesian statistical design of the clinical trial. Randomization will be 1:1 (GPS:placebo) and on-trial treatment duration will be up to 13 to 18 months. The primary endpoint of the clinical trial is OS, measured from the time of randomization (not initial diagnosis). No companion diagnostic will be used as MPM universally expresses WT1. Randomization will be stratified by region (U.S. compared to non-U.S.), timing of chemotherapy (neoadjuvant compared to adjuvant setting), and type of radiotherapy co-administered (intensity-modulated radiation therapy compared to other radiotherapy compared to none). The clinical trial will be adequately powered through a Bayesian adaptive approach to declare a positive result if certain *a priori* criteria are met, such as GPS providing an eight-month OS advantage compared to placebo, namely increasing median OS from approximately 16 months in the control arm to approximately 24 months in the active, GPS-treated arm with a 2-sided α of 5%; the exact values of the OS in the control and active arms (as well as the difference between the two) may differ from the above estimates so long as the “two look” group sequential, adaptive statistical design would be able to deliver at least 90% power with a one-sided α of 5% at the time of the definitive “positive signal” analysis. Two interim analyses (IA1, IA2) are planned (the second of the two, if positive for efficacy, would lead to main clinical trial early termination) in addition to a final analysis.

The following figure illustrates the MPM Phase 3 GPS clinical trial schema.



* Final N will be dependent on a priori rules from adaptive design implemented during the trial to ensure achievement of 90% power and 1-sided α of 5%
^ All agents are administered subcutaneously

GPS Monotherapy for Multiple Myeloma

MM is a cancer formed by malignant plasma cells, and its cause is unknown. The overgrowth of plasma cells in the bone marrow crowds out normal blood-forming cells, causing low blood counts and anemia (a shortage of red blood cells). MM can also cause a shortage of platelets (cells responsible for normal blood clotting) and lead to increased bleeding and bruising, along with problems fighting infections due to low white cell counts and/or lower levels of infection-fighting antibodies. MM causes a host of organ problems and symptoms, including fatigue, bone pain, fractures, circulatory problems (in small vessels of the brain, eye, retina, heart, bowel, etc.) and kidney failure.

Treatment for MM includes chemotherapy, glucocorticoids, drugs that modulate the immune system (immunomodulatory drugs, or IMiDs), radiation and autologous stem cell transplants, or ASCTs. Recently, several novel targeted agents, such as proteasome inhibitors and immunotherapeutics have been introduced in the treatment paradigms for MM. Most therapies in MM are applied in combination, sometimes with usage of three to four or even five agents administered concomitantly or sequentially. This has led to a progressive increase in the number of “lines” of therapy that MM patients receive, which currently can reach up to five to six or even higher. Of note, ASCT can be used more than once, called tandem ASCTs, to debulk the disease and offer prolonged secondary remissions. Finally, allogeneic HSCT is rarely used in MM, but still has its use in selected high-risk patients who are or become refractory to antimyeloma therapies.

The prognosis in MM is highly variable and depends on numerous risk factors, some related to the biology of the disease, others to the host (*e.g.* , age and functional status). Consequently, median survival can vary from up to at least 15 years in non-high-risk patients who achieve CRes, as defined by the International Myeloma Working Group, or IMWG, criteria, to approximately three years (from time of initial treatment) in patients with MM who achieve less than partial response, or PR, after ASCT. There are patients with MM who fare even more poorly than described above, for example those in the immediately aforementioned group who also have high-risk cytogenetics at baseline who may survive on average less than three years. Similarly, patients who are ineligible for ASCT and are managed only with chemotherapy and long-term IMiD maintenance (with up to nine cycles of lenalidomide) who also achieve less than CRes and remain MRD-positive demonstrate a three-year OS rate of only about 55%; these landmark three-year OS rates decrease by approximately 40 to 50% in patients who also have high-risk cytogenetics at baseline. Despite significant therapeutic advances in the management of MM, the prognosis of patients with high risk cytogenetics at the time of diagnosis remains quite poor, even when they successfully complete an ASCT, particularly if such patients continue to have evidence of MRD.

MM represents an intriguing opportunity to study both the clinical and immunologic effects of GPS in a hematologic malignancy. Therapeutic targeting of WT1 through immune pathways has largely not been pursued by others to date, and this indication presents an opportunity to target a malignancy that remains “incurable” in a strict sense, even in the face of significant advances that have accorded significant survival and freedom-from-active-disease benefit in standard risk patients. MM was chosen as a target indication for GPS for the following reasons:

- a clinical setting whereby MRD status can be achieved with standard upfront therapy. In this indication, with induction therapy using modern combination regimens followed by melphalan conditioning for myeloablation and a successful autotransplant, MM patients can achieve either CRes or very good partial response per IMWG criteria. This subgroup of patients would be optimal candidates for GPS therapy, even if they remain MRD(+) by flow cytometry or molecular markers;
- the detectable expression of WT1 in MM cells (malignant plasmacytes). In the past, MM was considered not to be a tumor type with strong expression of WT1. This was due to the use of immunohistochemical staining analysis with anti-WT1 antibodies that had suboptimal diagnostic sensitivity. It has been recently shown that while WT1 is expressed at lower levels in MM compared to other hematologic and solid tumors, this expression is almost universally seen and is highly relevant from an immunobiological perspective, as the immune system is able to reliably raise vigorous and sustained WT1-specific responses against malignant plasmacytes in the context of both MM and the rare, very aggressive variant of plasma-cell leukemia;
- preliminary evidence that WT1 expression could be involved in the MM tumorigenesis and promotion;
- early anecdotal (at the time) clinical data showing anti-myeloma activity of WT1 monovalent vaccines in Japanese patients (albeit restricted to HLA-A*2401 type);

[Table of Contents](#)

- the high degree of unmet medical need in MM patients with high-risk cytogenetics who also remain MRD(+) after frontline induction therapy and successful autotransplant, even when maintenance therapy is applied with either bortezomib or IMiDs (thalidomide); this has been shown in multiple studies, and to-date few options are available for addition of effective therapies in the maintenance setting to be added to agents such as lenalidomide (which is now standard of care in this setting); and
- a predictive assumption of very low to negligible degree of clinical toxicity with a WT1-targeted immunotherapy such as GPS due to the fact that WT1 in normal, non-cancerous tissues is both expressed at extremely low levels and limited in number of organs and tissues, but also due to the fact that WT1 fragments, or peptide epitopes, in normal cells are presented to host APCs in a different manner than are WT1 fragments produced in cancer cells.

Clinical Data—MM

We have reported comprehensive Phase 2 data for GPS in 19 patients with MM, which indicate promising clinical activity among MM patients with high-risk cytogenetics at initial diagnosis who also remain at least MRD(+) after successful frontline therapy (induction regimen followed by ASCT). This subgroup of MM patients, when serially assessed per IMWG criteria, typically relapse/progress within 12 to 14 months after ASCT, even when they receive maintenance therapy with IMiDs such as thalidomide or proteasome inhibitors such as bortezomib. Of note, 18 of the 19 patients received lenalidomide maintenance starting after the first three GPS administrations following ASCT; the remaining single patient received bortezomib under the same schedule. All patients had evidence of at least MRD after ASCT, while 15 of the 19 also had high-risk cytogenetics at diagnosis. Combined, these characteristics typically result in low PFS rates that do not exceed 12 to 14 months following ASCT, even while on maintenance therapy with IMiDs or proteasome inhibitors, which are the current standards of care. As of June 2017, median PFS with GPS was 23.6 months, while median OS had not been reached. Our results compare favorably with an unmatched cohort of broadly comparable MM patients with high-risk cytogenetics published by the Spanish PETHEMA group from the PETHEMA Network No. 2005–001110–41 trial. Our GPS therapy demonstrated a 1.87-fold increase in median PFS, as well as a 1.34-fold increase in the PFS rate at 18 months compared to the aforementioned historical cohort, which included MM patients with high-risk cytogenetics and MRD(+) post-ASCT and on continuous intensive maintenance with thalidomide +/- bortezomib. Our Phase 2 clinical trial started in June 2014 and has enrolled a total of 20 patients of which 19 are currently evaluable. The safety profile was devoid of grade 3/4/5 treatment-related adverse events. All non-progression events were confirmed and ongoing as of the time of the latest presentation (median follow-up at 20 months for survivors). Immune response data showed that up to 91% of patients had successfully developed T-cell (CD8 or CD4) reactivity to any of the 4 peptides within the GPS mixture, while up to 64% of patients demonstrated immune response positivity (CD4/CD8) against more than 1 WT1 peptide (multivalent responses). Moreover, multifunctional cross-epitope T-cell reactivity was observed in 75% of patients to antigenic epitopes against which hosts were not specifically immunized, in a pattern akin to epitope spreading. Further, a distinctive link was shown between the evolution of immune responses and changes in clinical response status (achievement of CR/very good partial response clinical status per IMWG criteria) over time following treatment with GPS, with each patient being used as his or her own control for each longitudinal comparison. This association has not been previously described for a peptide vaccine in MM. In summary, the results offer mechanistic underpinnings for immune activation against WT1 in patients with aggressive, high-risk MM, and support the potential antimyeloma activity of GPS.

GPS Combination Therapy with PD-1 blocker (nivolumab) for Ovarian Cancer

Epithelial cancer of the ovary, or ovarian cancer, is a relatively common gynecologic cancer that develops insidiously, and hence is associated with vague or no symptoms that would urge patients to seek medical attention. Not surprisingly, most women with ovarian cancer present with advanced (at least locally or regionally, and often systemically spread) disease. Ovarian cancer is managed with initial surgical resection followed by platinum-based chemotherapy. During the past decade, incremental advances in chemotherapy, and the introduction of targeted therapies (such as poly-ADP-ribose polymerase inhibitors and several others) and specially formulated compounds (such as liposomal anthracyclines) have resulted in improved survival and in more effective treatment of relapsed disease. In addition, a better understanding of genetic risk factors, along with aggressive screening, has permitted a tailored approach to preventive strategies, such as bilateral salpingo-oophorectomy in selected women along in specific patient populations genetically predisposed to this cancer (such as those harboring genetic alterations of the BRCA gene family). Although a complete clinical remission following initial chemotherapy can be anticipated for many patients, a review of “second-look” laparotomy, when it was

[Table of Contents](#)

often performed as a matter of routine care, indicates that less than 50% of patients are actually free of disease. Furthermore, nearly half of patients with a negative “second-look” procedure relapse and require additional treatment. Many patients will achieve a second complete clinical response with additional chemotherapy. However, almost all patients will relapse after a short remission interval of nine to 11 months. Effective strategies, such as introduction of novel immunotherapies, to prolong remission or to prevent relapse are required, as subsequent remissions are of progressively shorter duration until chemotherapy resistance broadly develops, leading to eventual disease-related demise.

Ovarian cancer represents an intriguing opportunity to study both the clinical and immunologic effects of GPS in another solid tumor. Additionally, therapeutic targeting of WT1 through immune pathways has largely not been pursued by others to date for this indication and ovarian cancer remains “incurable” once it advances and becomes disseminated, even in the face of significant advances in the field. Ovarian cancer was chosen as a target indication for the following reasons:

- ovarian cancer presents a clinical setting whereby MRD status can be achieved with standard upfront therapy both immediately after first line therapy, but also after effective debulking of the “first relapse.” The latter subgroup of patients (after successful second line treatment/first salvage, lacking demonstrable macroscopic residual disease) would be optimal candidates for GPS therapy, as no standard maintenance therapy exists for such patients and the subsequent relapse patterns and metrics are known and predictable;
- the high levels of expression of WT1 in ovarian cancer cells. In fact, WT1 expression is so frequent that pathologists routinely use immunohistochemical stains for WT1 (with a standardized convention for describing expression and determining as “positive” or “negative”) to help distinguish epithelial ovarian cancers from other tumors;
- preliminary evidence that WT1 expression may be linked to prognosis in ovarian cancer and that it may play an anti-apoptotic role in ovarian cancer cell lines;
- the high degree of unmet medical need in ovarian cancer patients after first (or subsequent) successful “salvage” debulking therapy and the absence of effective therapies for such patients; and
- a predictive assumption of very low to negligible degree of clinical toxicity with a WT1-targeted immunotherapy such as GPS due to the fact that WT1 in normal, non-cancerous tissues is both expressed at extremely low levels and limited in number of organs and tissues, but also due to the fact that WT1 fragments, or peptide epitopes, in normal cells are presented to host APCs in a different manner than are WT1 fragments produced in cancer cells.

Clinical Data—Ovarian Cancer

GPS is being studied in combination with nivolumab, a PD-1 immune checkpoint inhibitor, in an open-label, non-randomized Phase 1/2 clinical trial, which is independently sponsored by MSK. The aim of the study is to evaluate the safety and efficacy of this combination in patients with recurrent ovarian, fallopian tube or primary peritoneal cancer who are in second or greater clinical remission (after their successful first or subsequent “salvage” therapy). This Phase 1/2 clinical trial was planned to enroll at least ten patients with recurrent ovarian cancer who are in second or greater clinical remission at MSK. Patients enrolled in the clinical trial received the combination therapy during the clinical trial’s 14-week treatment period. Individuals who had not progressed by the end of this period also received a maintenance course of GPS. Initial immune response and clinical evolution data are due in the first half of 2018, as is information on the primary endpoint of this clinical trial, which is the safety of repeated GPS administrations, for a total of six doses, in combination with seven infusions of nivolumab. This clinical trial addresses the safety of GPS when co-administered with a checkpoint inhibitor, with the goal of possibly detecting an efficacy signal based on PFS and OS (versus historical data of monotherapy with nivolumab in this patient population), as well as documenting the pattern of WT1-specific immune responses post-GPS. Pending the successful progress of this clinical trial a larger, follow-on, randomized clinical trial may be planned.

[Table of Contents](#)

GPS Combination Therapy with PD1 blocker (pembrolizumab) for Other Cancers

In addition, given the potential immunobiologic and pharmacodynamic synergy between GPS and a PD1 blocker, as well as the prevalent expression of WT1 in five select tumor types (colorectal cancer, triple-negative breast cancer, small cell lung cancer, ovarian cancer and AML), we entered into a clinical trial collaboration and supply agreement through a Merck subsidiary for the conduct of a combination clinical trial of GPS with pembrolizumab (Keytruda).

The purpose of this five-arm “basket” trial is to determine if the administration of GPS in combination with pembrolizumab has the potential to demonstrate clinical activity in the presence of macroscopic disease, where monotherapy with either agent would have a more limited effect. The negative influence of tumor microenvironment factors on the immune response is predicted to be mitigated by PD1 inhibition (by pembrolizumab) thus allowing the patients’ own immune cells to invade and destroy cancerous growth deposits specifically sensitized against WT1 (by concomitantly-administered GPS).

NeuVax™ (nelipepimut-S)

NeuVax (nelipepimut-S) is a cancer immunotherapy targeting HER2 expressing cancers. NeuVax is the immunodominant nonapeptide derived from the extracellular domain of the HER2 protein, a well-established and validated target for therapeutic intervention in breast and gastric carcinomas. The NeuVax vaccine is combined with GM-CSF (Sargramostim) for injection in between the layers of the skin epidermis, ie., intradermal administration. Data has shown that an increased presence of circulating tumor cells, or CTCs, may predict reduced DFS and OS, suggesting a presence of isolated micrometastases, not detectable clinically, but, over time, can lead to recurrence of cancer, most often in distant sites. After binding to the specific HLA molecules on antigen presenting cells, the nelipepimut-S sequence stimulates specific cytotoxic T lymphocytes, or CTLs, causing significant clonal expansion. These activated CTLs recognize, neutralize and destroy, through cell lysis, HER2 expressing cancer cells, including occult cancer cells and micrometastatic foci. The nelipepimut immune response can also generate CTLs to other immunogenic peptides through inter- and intra-antigenic epitope spreading.

NeuVax for Breast Cancer

According to NCI, over 230,000 women in the United States are diagnosed with breast cancer annually. While improved diagnostics and targeted therapies have decreased breast cancer mortality in the United States, metastatic breast cancer remains incurable. Approximately 75% to 80% of breast cancer patients have tissue test positive for some increased amount of the HER2 receptor, which is associated with disease progression and decreased survival. Only approximately 20% to 30% of all breast cancer patients-those with HER2 immunohistochemistry, or IHC, 3+ disease, or IHC 2+ and fluorescence in situ hybridization, or FISH, amplified-have a HER2 directed, approved treatment option available after their initial standard of care. This leaves the majority of breast cancer patients with low-to-intermediate HER2 expression (IHC 1+, 2+) with tumors that are not HER2-amplified by FISH ineligible for targeted therapy with trastuzumab and without an effective targeted treatment option to prevent cancer recurrence.

[Table of Contents](#)

We currently have two investigator-sponsored trials ongoing with NeuVax in combination with trastuzumab (Herceptin; Genentech/Roche). The combination of trastuzumab and NeuVax has been shown pre-clinically and in a pilot study to be synergistic. Our Phase 2b trial is a multi-center, randomized, single-blinded, placebo-controlled trial in 275 HER2 1+/2+ breast cancer patients with positive nodes and/or TNBC. The study combines NeuVax and trastuzumab (Herceptin) in the adjuvant setting aiming to prevent recurrence or death. Tumors in these women show low levels of expression of HER2, as measured by IHC, i.e., at a level of either 1+ or 2+ and, hence, these patients are not considered candidates for Herceptin. Patients who are hormone receptor-negative and HER2 1+/2+ by IHC are currently defined as TNBC patients. Eligible patients are randomized to receive NeuVax + GM-CSF + trastuzumab or trastuzumab + GM-CSF alone. The primary endpoint of the study is DFS. Genentech/Roche is providing the trastuzumab and partial funding for this trial. Data presented in October 2016 demonstrated that this novel combination of trastuzumab and NeuVax with HER2 low-expressing patients is well tolerated and the cardiac effects of trastuzumab are not impacted by the addition of NeuVax. In February 2017, the DSMB reported that there were no safety concerns with the trial and the trial is not futile. The recommendation from the DSMB was to continue the trial with one revision to the statistical analysis plan regarding the timing of the pre-specified interim analysis. Given the lengthy duration of enrollment for the trial, the DSMB determined that the pre-specified interim efficacy analysis be moved up from 12 months to 6 months after the last patient is enrolled. Enrollment was completed and the interim efficacy analysis occurred in late March 2018, as reported by us in a press release dated April 2, 2018.

The interim efficacy analysis, conducted by an independent DSMB of the efficacy and safety data for the study in an overall population of 275 patients as well as the two primary study target patient populations (node-positive and TNBC) after a median follow-up of 19 months, demonstrated a clinically meaningful difference in median DFS in favor of the active arm (NeuVax + Herceptin), a primary endpoint of the study, with hazard ratios of 0.67 and 0.61 in the intent to treat and modified intent to treat populations (i.e., those who received at least one dose of vaccine or control) as well as a 34.9% and 39.5% reduction in relative risk of recurrence in the active versus control arms in the intent to treat and modified intent to treat populations, respectively. A clinically meaningful and also statistically significant difference was found between the two arms in the cohort of patients (n= 98) with TNBC, with a hazard ratio of 0.26 and a p-value of 0.023 in favor of the NeuVax + Herceptin combination. Similarly, a clinically meaningful and statistically significant difference was found between the two arms in favor of the combination in the cohort of patients not receiving hormonal therapy (n = 110), with a hazard ratio of 0.24 and a p-value of 0.009. This pre-specified interim analysis also showed an adverse event profile with no notable differences between treatment arms. This analysis confirmed the 2016 data showing that the addition of NeuVax to Herceptin did not result in any additional cardiotoxicity compared to Herceptin alone. Based on these results, and the DSMB's recommendation, we plan to expeditiously seek regulatory guidance by the FDA for further development of the combination of NeuVax + Herceptin in TNBC, considering the statistically significant benefit of the combination therapy seen in this population with large unmet medical need.

[Table of Contents](#)

Our second combination investigator sponsored trial is a Phase 2 in HER2 3+ breast cancer patients who have completed neoadjuvant therapy with an approved regimen that includes trastuzumab and failed to achieve a pathological complete response, meaning they have microscopic evidence of residual disease and are therefore at an increased risk of disease recurrence. This multi-center, prospective, randomized, single-blinded Phase 2 clinical trial is enrolled with approximately 100 patients with a diagnosis of HER2 3+ breast cancer who are HLA A2+ or HLA A3+ and are determined to be at high-risk for recurrence. High-risk is defined as having received neoadjuvant therapy with an approved regimen that includes trastuzumab but not obtaining a pathological complete response at surgery, or those who undergo surgery as a first intervention and are found to be pathologically node-positive. These high-risk patients are known to have higher recurrence rates than other HER2 3+ breast cancer patients. Eligible patients will be randomized to receive NeuVax + GM-CSF + trastuzumab or trastuzumab + GM-CSF alone. The primary endpoint of the study is disease-free survival. Funding for this trial was awarded through the Congressionally Directed Medical Research Program, funded through the Department of Defense, via a breast cancer research program breakthrough award. In February 2017, the DSMB reported that there were no safety concerns with the trial and the trial is not futile. The pre-specified interim safety analysis was also completed on n=50 patients and demonstrated that the agent is well tolerated with no increased cardiotoxicity associated with giving NeuVax in combination with trastuzumab. The recommendation from the DSMB was to continue the HER2 3+ trial unmodified.

A Phase 3 PRESENT (**P** revention of **R** eurrence in **E** arly- **S** tage, Node- Positive Breast Cancer with Low to Intermediate HER2 **E** xpression with **N** euVax **T** reatment) study enrolled 758 HER2 1+/2+ patients who are node-positive and HLA A2 or A3 positive. On June 27, 2016, the independent data monitoring committee recommended that the Phase 3 PRESENT clinical trial be stopped for futility. The PRESENT trial was stopped, and we initiated an investigation into the causes of the recommendation. Our analysis of the data showed that there was a separation of the curves, albeit not statistically significant, with the control arm performing better than expected and the NeuVax arm performing consistent with our protocol assumptions for the control group. Because the study was deemed futile, we closed the PRESENT trial.

NeuVax for Ductal Carcinoma In Situ of the Breast

DCIS is defined by the NCI as a noninvasive condition in which abnormal cells are found in the lining of a breast duct and have not spread outside the duct to other tissues in the breast. DCIS is the most common type of breast neoplasm with malignant potential. In some cases, DCIS may become invasive cancer and spread to other tissues, and at this time, there is no way to know which lesions could become invasive. Current treatment options for DCIS include breast-conserving surgery and radiation therapy with or without tamoxifen, breast-conserving surgery without radiation therapy, or total mastectomy with or without tamoxifen. According to the American Cancer Society, in the United States, there were over 60,000 diagnoses of DCIS in 2015. We are supporting an independent investigator-sponsored, or IST, Phase 2 trial to evaluate women diagnosed with DCIS who are HLA-A2 positive, who express HER2 at IHC 1+, 2+, or 3+ levels, and who are pre or post menopausal. Patients will be randomized to one of two arms: NeuVax plus GM-CSF or GM-CSF alone. The clinical study name is VADIS: Phase 2 Trial of Nelipepimut-S **V**accine in Women with **D**C **I**S of the Breast. The trial is sponsored and operationalized by the NCI, studying NeuVax's potential clinical effects in earlier stage disease. The trial has an immunological endpoint evaluating NeuVax peptide-specific cytotoxic T lymphocyte (CTL; CD8+ T-cell) response in vaccinated patients.

NeuVax for Gastric Cancer

According to the NCI, gastric (stomach) cancer is a disease in which malignant (cancer) cells form in the lining of the stomach. Almost all gastric cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids). Other types of gastric cancer are gastrointestinal carcinoid tumors, gastrointestinal stromal tumors, and lymphomas. Infection with bacteria called *Helicobacter pylori* is thought to be the cause of gastric cancer and age, diet, and stomach disease can affect the risk of developing gastric cancer. Gastric cancer is often diagnosed at an advanced stage because there are no early signs or symptoms and is the second-most common cancer among males and third-most common among females in Asia and worldwide with over 63,000 new cases a year in India, where an initial clinical trial of NeuVax is planned. Overexpression of the HER2 receptor occurs in approximately 20% of gastric and gastro-esophageal junction adenocarcinomas, predominantly those of the intestinal type. Overall, without regard to the stage of cancer, only approximately 28% of patients with stomach cancer live at least five years following diagnosis and new adjuvant treatments are needed to prevent disease recurrence.

We currently have an agreement with Dr. Reddy's Laboratories Ltd., or Dr. Reddy's, to conduct a Phase 2 independent investigator-sponsored study in gastric cancer in India. To date, Dr. Reddy's has not initiated the Phase 2 study with NeuVax.

GALE-301 and GALE-302

GALE-301 and GALE-302 are cancer immunotherapies that target FBP receptor-alpha. FBP is a well-validated therapeutic target that is highly over-express in ovarian, endometrial and breast cancers, and is the source of immunogenic peptides that can stimulate CTLs to recognize and destroy FBP-expressing cancer cells. Current treatments after surgery for these diseases are principally with platinum-based chemotherapeutic agents. These patients suffer a high recurrence rate and most relapse with an extremely poor prognosis. GALE-301 and GALE-302 are immunogenic peptides that consist of a peptide derived from FBP combined with GM-CSF for the prevention of cancer recurrence in the adjuvant setting. GALE-301 is the E39 peptide, while GALE-302 is an attenuated version of this peptide, known as E39'. Two early stage clinical trials have been completed with our FBP peptides in ovarian, endometrial, and breast cancers. In June 2016, the FDA granted two Orphan Drug Product Designations for the treatment (including prevention of recurrence) of ovarian cancer: One for GALE-301 (E39) and one for GALE-302 (E39').

GALE-301 and GALE-302 in Ovarian Cancer

According to the NCI's Surveillance, Epidemiology, and End Results, or SEER Program, new cases of ovarian cancer occur at an annual rate of 11.9 per 100,000 women in the United States, with an estimated 22,280 new cases and 14,240 deaths in 2016. Only 46.2% of ovarian cancer patients are expected to survive five years after diagnosis. Approximately 1.3% of women will be diagnosed with ovarian cancer at some point during their lifetime (2011-2013 data). The prevalence data from 2013 showed an estimated 195,767 women living with ovarian cancer in the United States. Due to the lack of specific symptoms, the majority of ovarian cancer patients are diagnosed at later stages of the disease, with an estimated 80% of women presenting with advanced-stage (III or IV) disease. These patients have their tumors routinely surgically debulked to minimal residual disease, and then are treated with platinum- and/or taxane-based chemotherapy. While many patients respond to this treatment regimen and become clinically free-of-disease, the majority of these patients will relapse. Depending upon their level of residual disease, the risk for recurrence after completion of primary therapy is approximately 70%. Unfortunately, for these women, once the disease recurs, treatment options are limited and the disease is most likely incurable.

GALE-401 (anagrelide controlled release)

GALE-401 contains the active ingredient anagrelide, an FDA-approved product, for the treatment of patients with MPNs to lower abnormally elevated platelet levels. The currently available immediate release, or IR, version of anagrelide causes adverse events that are believed to be dose and plasma concentration dependent and may limit the use of the IR version of the drug. Therefore, reducing the maximum concentration, or C max, and increasing the half-life of the drug is hypothesized to reduce the side effects, while preserving the efficacy, potentially allowing a broader use of the drug.

GALE-401 in Essential Thrombocythemia

ET is a myeloproliferative blood disorder and is characterized by the overproduction of platelets in the bone marrow. Elevated platelets alter the normal process of blood coagulation and can lead to thromboembolic events. About a third of patients are asymptomatic at the time of diagnosis. However, many patients develop symptoms during the course of the disease that affect the quality of life.

Multiple Phase 1 studies in 98 healthy subjects have shown GALE-401 reduces the C max of anagrelide and increases the half-life following oral administration, appears to be well tolerated at the doses administered, and to be capable of reducing platelet levels effectively. The Phase 1 program provided the desired PK/PD (pharmacokinetic/pharmacodynamic) profile to enable the initiation of the Phase 2 proof-of-concept trial. The Phase 2, open label, single arm, proof-of concept trial enrolled 18 patients in the United States for the treatment of thrombocytosis, or elevated platelet counts, in patients with MPNs. Final safety and efficacy data from this Phase 2 trial were presented in December 2015 and demonstrated a prolonged clinical benefit with a potentially improved safety profile.

We have analyzed our data and the treatment landscape for MPNs, with a current focus on ET. Subject to completion of the manufacturing of the new formulation and other internal work, GALE-401 would be poised to advance into a Phase 3 clinical trial in ET patients who are intolerant or resistant to hydroxyurea. This trial is designed to compare GALE-401 (drug arm) versus best available therapy to include a sizable population of patients treated with anagrelide IR.

Strategic Collaborations and License Agreements

Although we currently have a number of collaborations with corporate partners for the development of our product candidates in various territories worldwide, the following development collaborations are those that are most significant to us from a financial statement perspective and where significant ongoing collaboration activity exists.

Exclusive License Agreement—Memorial Sloan Kettering Cancer Center

In September 2014, we entered into a license agreement with MSK, under which we were granted an exclusive license to develop and commercialize MSK's WT1 peptide vaccine technology. The MSK original license agreement was first amended in October 2015, further amended in August 2016, amended and restated in May 2017 and again amended and restated in October 2017. In connection with the entry of the original license agreement and its amendments, MSK was issued or assigned an aggregate of 4,846 ordinary shares of Private SELLAS common stock for the year ended December 31, 2017. These common stock shares were converted into our common stock shares upon the Merger.

Under the terms of the current amended and restated MSK license agreement, we agreed to pay minimum royalty payments in the amount of \$0.1 million each year commencing in 2015 and research funding costs of \$0.2 million in each year and for three years commencing in January 2016. We also agreed to pay MSK a mid-six digit amount over a one year period in exchange for MSK's agreement to further amend and restate the MSK license agreement in October 2017, which resulted in the grant of rights to additional intellectual property to us and extension/relaxing of certain deadlines. In addition, to the extent certain development and commercial milestones are achieved, we also agreed to pay MSK up to \$17.4 million in aggregate milestone payments for each licensed product, and for each additional patent licensed product, up to \$2.8 million in additional milestone payments. We also agreed to pay MSK a tiered royalty in the mid-single digits in the event of commercial sales of any licensed products. We also agreed to raise \$25.0 million in gross proceeds no later than December 31, 2018. In the event we do not raise such amount by December 31, 2018, MSK may terminate the license agreement after complying with the notice and cure periods of the agreement, or MSK may elect to receive additional common stock shares in an amount equal to 1.5% of our then fully diluted share capital, which would stay the right to terminate for a period of time.

Unless terminated earlier in accordance with its terms, the MSK license agreement as amended and restated, will continue on a country-by-country and licensed product-by-licensed product basis, until the later, of: (a) expiration of the last valid claim embracing such licensed product; (b) expiration of any market exclusivity period granted by law with respect to such licensed product; or (c) ten (10) years from the first commercial sale in such country.

Merck & Co., Inc. Clinical Trial Collaboration and Supply Agreement

In September 2017, we entered into a clinical trial collaboration and supply agreement through a Merck subsidiary, whereby we agreed with the Merck subsidiary to collaborate on a research program to evaluate GPS as it is administered in combination with their PD1 blocker pembrolizumab (Keytruda) in a Phase 1/2 clinical trial enrolling patients in up to five cancer indications, including both hematologic malignancies and solid tumors.

The Phase 1/2 clinical trial will utilize a combination of GPS plus pembrolizumab (Keytruda) in patients with WT1+ relapsed or refractory tumors. Specifically, the study is expected to explore the following cancer indications: colorectal (arm enriched in but not exclusive to patients with microsatellite instability-low), ovarian, small cell lung, triple-negative breast, and AML. This study will assess the efficacy and safety of the combination, comparing overall response rates and immune response markers achieved with the combination compared to prespecified rates based on those seen with pemrolizumab alone in comparable patient populations. The trial is anticipated to begin in the third quarter of 2018 (pending funding availability).

Advaxis, Inc. Research and Development Collaboration Agreement

In February 2017, we entered into a research and development collaboration agreement with Advaxis whereby we agreed to collaborate on a research program to evaluate, through a PoP trial, a clinical candidate comprised of the combination of Advaxis' proprietary Lm-based antigen delivery technology and GPS. Unless terminated earlier in accordance with its terms, the Advaxis agreement will expire upon the earlier of: (a) completion of the PoP trial or (b) a decision by the parties to cease further development of the clinical candidate.

The Advaxis agreement provides for cost-sharing between the parties, with Advaxis being responsible for the costs of performing the research activities and filing any investigational new drug, or IND, cost-sharing for preparation of the IND, and we being responsible for the costs (exclusive of product costs) of conducting the PoP trial. We also agreed to make certain non-refundable milestone payments to Advaxis having an aggregate amount of up to \$108.0 million, upon meeting certain clinical, regulatory and commercial milestones. In addition, if net sales exceed certain targets, we agreed to make non-refundable sales milestone payments up to \$250.0 million and royalty payments based on specific royalty rates, with a maximum rate capped at a percentage rate in the low teens if net sales exceed \$1.0 billion.

The University of Texas M. D. Anderson Cancer Center and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. License Agreement

In September 2006, we acquired rights and assumed obligations under a license agreement between Apthera and The University Texas M.D. Anderson Cancer Center, or MDACC, and The Henry M. Jackson Foundation, or HJF, which granted us exclusive worldwide rights to an United States patent covering the nelipepimut-S peptide and several United States and foreign patents and patent applications covering methods of using the peptide as a vaccine. Under the terms of this license, we are required to pay an annual maintenance fee, clinical milestone payments and royalty payments based on sales of NeuVax, or other therapeutic products developed from the licensed technologies.

Biovascular, Inc. Exclusive License Agreement

In December 2013, we acquired worldwide rights to anagrelide controlled release, or CR, formulation, GALE-401, through our acquisition of Mills, LLC, or Mills our wholly owned subsidiary, GALE-401 contains the active ingredient anagrelide, an FDA-approved product that has been in use since the late 1990s for the treatment of MPNs. Mills entered into an exclusive license agreement with BioVascular, Inc., or BioVascular. The license agreement granted us an exclusive license to develop and commercialize anagrelide CR formulation. Under the terms of the license agreement and its amendments, Mills agreed to pay BioVascular, a mid-to-low single digit royalty on net revenue from the sale of licensed products, as well as, future cash milestone payments based on the achievement of specified regulatory milestones. We are responsible for patent prosecution and maintenance.

In September 2017, Mills and BioVascular entered into an amendment to our exclusive license agreement to modify the certain terms of the license agreement, including but not limited to, (i) eliminating the 3% royalty rate on annual net sales of \$50.0 million and the 4% royalty now applies to annual net sales of up to \$100.0 million, (ii) making an advance payment of approximately \$0.4 million for the milestone related to the initiation of the Phase 3 clinical trial payable in two tranches with the first payment of \$0.2 million payable on or before October 31, 2017 and the second payment of approximately \$0.2 million payable 30 days after the consummation of the Merger but no later than December 31, 2017, (iii) adding a payment for a sublicense by Mills to a third party of 25% of any cash received for upfront fees or milestone payments if the sublicense is executed prior to first patient enrolled in the Phase 3 clinical trial and 17.5% of any cash received for upfront fees or milestone payments if the sublicense is executed after the first patient is enrolled in the Phase 3 clinical trial, and (iv) if the first patient is not enrolled in the Phase 3 clinical trial by December 31, 2018, BioVascular shall have the right to terminate the license agreement and the advance payment shall not be repaid to Mills. Under the terms of a September 2017 consent between Comerica Bank, BioVascular and Mills, Comerica Bank shall receive \$0.1 million of the approximately \$0.4 million advance payment from Mills.

Manufacturing

We do not own or operate manufacturing facilities for the production of our product candidates nor do we have plans to develop our own manufacturing operations in the foreseeable future. We currently depend on third-party contract manufacturers for all of our required raw materials, active pharmaceutical ingredients, and finished product candidate for our clinical trials. We do not have any current contractual arrangements for the manufacture of commercial supplies of any product candidates. We currently employ internal resources and third-party consultants to manage our manufacturing contractors.

Sales and Marketing

We have not yet defined our sales, marketing or product distribution strategy for our product candidates or any future product candidates because they are still in pre-clinical or clinical development. Our future commercial strategy may include the use of strategic partners, distributors, a contract sale force, or the establishment of our own commercial and specialty sales force, as well as similar strategies for regions and territories outside the United States. We plan to further evaluate these alternatives as we approach approval for the use of our product candidates for one or more indications.

Intellectual Property

Our commercial success depends in part on our ability to avoid infringing the proprietary rights of third parties, our ability to obtain and maintain proprietary protection for our technologies where applicable and to prevent others from infringing our proprietary rights. We seek to protect our proprietary technologies by, among other methods, evaluating relevant patents, establishing defensive positions, monitoring European Union oppositions and pending intellectual property rights, preparing litigation strategies in view of the United States legislative framework and filing United States and international patent applications on technologies, inventions and improvements that are important to our business. Patents and other intellectual property rights are crucial to our success. It is our policy to protect our intellectual property rights through available means, including filing and prosecuting patent applications in the United States and other countries, protecting trade secrets, and utilizing regulatory protections such as data exclusivity. We also include restrictions regarding use and disclosure of our proprietary information in our contracts with third parties, and utilize customary confidentiality agreements with our employees, consultants, clinical investigators and scientific advisors to protect our confidential information and know-how. Together with our licensors, we also rely on trade secrets to protect our combined technology especially where we do not believe patent protection is appropriate or obtainable. It is our policy to operate without knowingly infringing on, or misappropriating, the proprietary rights of others.

An international patent law treaty, or PCT, provides a unified procedure for filing patent applications to protect inventions in each of its contracting states. Thus, a single PCT application can be converted into a national stage patent application in any of the more than 145 PCT contracting states, and is considered a simple, cost-effective means for seeking patent protection in numerous regions or countries. This nationalization (converting into an application in any of the contracting states) typically occurs 18 months after the PCT application filing date. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary position.

The term of individual patents depends upon the legal term of the patents in countries in which they are obtained. In most countries, including the United States, the patent term is generally 20 years from the earliest date of filing a non-provisional patent application in the applicable country. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the United States Patent and Trademark Office in examining and granting a patent or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date.

[Table of Contents](#)

The following chart summarizes our intellectual property rights:

Product Candidate	Product Candidate Component	Jurisdiction	Indication	Claims	Scope	Latest Estimated Patent Exclusivity Period
GPS	Peptide WT1-A1	United States	Any	Composition of Matter	1 issued	03/22/2026*
GPS	Peptide WT1-A1	Australia, Switzerland, Germany, Spain, France, Great Britain, Italy	Any	Composition of Matter	8 issued	11/30/2024
GPS	Peptide WT1-A1	Canada	Any	Composition of Matter and Method of Use	1 issued	11/30/2024
GPS	Peptides WT1-427 long and WT1-331 long	United States	Any	Composition of Matter	1 issued	10/26/2031*
GPS	Peptides WT1-427 long and WT1-331 long	United States	WT1-expressing cancer	Method of Use	1 issued	10/17/2026
GPS	Peptides WT1-427 long and WT1-331 long	United States	Any	Composition of Matter and Method of Use	1 pending	10/17/2026**
GPS	Peptide WT1-427 long	Australia, Switzerland, Germany, Spain, France, Great Britain, Ireland, Italy	Any	Composition of Matter and Method of Use	9 issued	10/17/2026
GPS	Peptide WT1-331 long	Switzerland, Germany, Spain, France, Great Britain, Ireland, Italy	Any	Composition of Matter and Method of Use	8 issued	10/17/2026
GPS	Peptide WT1-427 long	Canada	Any	Composition of Matter and Method of Use	1 issued	10/17/2026
GPS	Peptides WT1-427 long and WT1-331 long	Canada	Any	Composition of Matter and Method of Use	1 pending	10/17/2026**
GPS	Non-product peptide	United States	Any	Composition of Matter	1 issued	12/21/2026
GPS	Peptide WT1-122A1 long	United States	Any	Composition of Matter	1 issued	02/20/2033*
GPS	Peptide WT1-122A1 long	United States	Any	Composition of Matter and Method of Use	1 pending	04/10/2027**
GPS	Peptide WT1-122A1 long	Austria, Belgium, Switzerland, Germany, Spain, Finland, France, Great Britain, Greece, Ireland, Italy, Netherlands, Poland, Romania, Turkey	Any	Composition of Matter and Method of Use	15 issued	04/10/2027
GPS	Peptide WT1-122A1 long	Europe, Canada, Hong Kong	Any	Composition of Matter and Method of Use	3 pending	04/10/2027

Not applicable	Non-product peptide	United States	Any	Composition of Matter and Method of Use	1 issued, 1 pending	01/15/2034
Not applicable	Non-product peptide	Australia, Canada, China, Europe, Japan	Any	Composition of Matter and Method of Use	5 pending	01/15/2034**

[Table of Contents](#)

Product Candidate	Product Candidate Component	Jurisdiction	Indication	Claims	Scope	Latest Estimated Patent Exclusivity Period
Not applicable	Not applicable	United States	Any	Composition of Matter and Method of Use	1 pending	06/30/2038***
NeuVax™ (nelipepimut-S)		United States, Australia, Canada, China, Europe, Hong Kong, Japan, Korea and Mexico	Recurrence of cancers expressing low to intermediate levels of HER2/neu	Methods of Use	6 pending and 10 issued	2028
NeuVax™ in combination with trastuzumab		United States and Australia	HER2/neu expressing cancer	Methods of Use	2 issued	2026
GALE-401		United States	Vaso-occlusive	Method of Use	1 issued	2020
GALE-401 (Anagrelide Controlled Release)		United States, Europe, India, Japan and UK	Platelet Lowering	Anagrelide Controlled Release Formulations & Methods of Use	4 pending and 7 issued	2029
GALE-301		United States and PCT	Cancers expressing low levels of FBP (IHC 0 or 1+)	Dosage Regimen	2 pending	2037
GALE-301 & GALE-302 Combination		United States, Canada, Europe, and Japan	Cancers expressing Folate Binding Protein (FBP)	Compositions & Methods of Use	1 pending and 8 issued	2022
GALE-301 & GALE-302 Combination		United States	Cancers expressing Folate Binding Protein (FBP)	Combination Dosage Regimen	1 allowed	2036

* Includes patent term adjustment

** Projected expiration date of pending application, if granted

*** Projected expiration date of non-provisional application to be filed from provisional application

Each of the above-referenced pending or issued patents has been licensed by us. To our knowledge, there are no contested proceedings or third-party claims relating to any of the above pending or issued patents.

Competition

Cancer immunotherapy has become a significant growth area for the biopharmaceutical industry, attracting large pharmaceutical companies as well as small niche players. Generally, our principal competitors in the cancer immunotherapy market comprise both companies with currently approved products for various indications, such as manufactures of approved bispecific antibodies, CAR-T cells, and checkpoint inhibitors, as well as companies currently engaged in cancer immunotherapy clinical development. The large and medium-size players who have successfully obtained approval for cancer immunotherapy products include Bristol-Myers Squibb Company, Merck & Co., Inc., Genentech, Inc. (a subsidiary of Roche Holding AG), AstraZeneca PLC, Celgene Corporation, Johnson & Johnson/Janssen Pharmaceuticals, Amgen, Novartis, Acerta Pharmaceuticals, Juno Therapeutics, Inc., Kite Pharm, Inc., a wholly-owned subsidiary of Gilead Sciences, Inc. and Pfizer, Inc./EMD Serono, Inc.

[Table of Contents](#)

Companies developing novel products with similar indications to those we are pursuing are expected to influence our ability to penetrate and maintain market share. Principal competitors for our AML indication include both companies with currently approved products in AML, such as Agios Pharmaceuticals, Inc. (the holder of U.S. rights to Idhifa), Novartis AG (the holder of rights to Rydapt), among others, as well as those with front-line chemotherapy drugs and maintenance therapies such as Jazz Pharmaceuticals plc (the holder of rights to Vyxeos), as well as Pfizer (the holder of rights to Mylotarg), among others, as well as companies with drugs currently in development in AML. Our principal competitors for the MPM indication include both companies with currently approved products in MPM, such as Eli Lilly and Co. (the holder of rights to Alimta), among others, as well as those with drugs currently in development in MPM. Our principal competitor for ET patients who are intolerant or resistant to hydroxyurea indication is Incyte Corporation in the United States (the holder of rights for Jakafi) and Novartis outside the United States (the holder of rights for JAKAVI).

For patients with MPNs, current treatment options include Agrylin (anagrelide hydrochloride) and its generic equivalents, hydorxyurea and interferon alpha. Agents currently being studied in patients with MPNs include investigational JAK2 inhibitors (e.g., LY2784544 (Eli Lilly), momelotinib (Gilead Sciences), ruxolitinib (Incyte), fedratinib (Impact Biomedicines/Celgene) and pegylated interferon alfa-2a (Pegasys, Genentech/Roche).

For patients with early stage breast cancer, adjuvant therapy is often given to prevent recurrence and increase the chance of long-term disease free survival. Adjuvant therapy for breast cancer can include chemotherapy, hormonal therapy, radiation therapy, or combinations thereof. In addition, the HER2 targeted drug trastuzumab (Herceptin) – alone or in combination with pertuzumab (Perjeta), both manufactured and marketed by Roche/Genentech- may be given to patients with tumors with high expression of HER2 (IHC 3+), as well as other novel targets such as MUC1 which may be useful in treating breast cancer.

There are a number of cancer vaccines in development for breast cancer, including but not limited to Lapuleucel-T (Dendreon), AE-37 (Antigen Express), and Stimuvax (Merck KgA). While these development candidates are aimed at a number of different targets, and AE-37 has published data in the HER2 breast cancer patient population, there is no guarantee that any of these compounds will not in the future be indicated for treatment of low-to-intermediate HER2 breast cancer patients and become directly competitive with NeuVax.

A number of chemotherapeutic agents have demonstrated activity in gynecological carcinomas (ovarian and endometrial), particularly platinum-based regimens. New chemotherapy agents are being evaluated including trabectedin (Yondelis) and belotecan, as well as targeted agents such as bevacizumab (Avastin) and pazopanib (Votrient). Monoclonal antibodies are also being developed including farletuzumab and catumaxomab. We are not aware of any of these agents being evaluated in the adjuvant setting where GALE-301 is being considered for further development. TPIV200 (TapImmune) is in development targeting FBP in ovarian cancer.

Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical and human resources than we do, and experience in obtaining FDA and other regulatory approvals of treatments and commercializing those treatments. Accordingly, our competitors may be more successful than us in obtaining approval for cancer immunotherapy products and achieving widespread market acceptance. Our competitors' treatments may be more effectively marketed and sold than any products we may commercialize, thus causing limited market share before we can recover the expenses of developing and commercializing of our cancer immunotherapy product candidate.

Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These activities may lead to consolidated efforts that allow for more rapid development of cancer immunotherapy product candidates.

These competitors also compete with us in recruiting and retaining qualified scientific and management personnel, the ability to work with specific clinical contract organizations due to conflict of interest, and also the conduct of trials in the ability to recruit clinical trial sites and subjects for our clinical trials.

[Table of Contents](#)

We expect any products that we develop and commercialize to compete on the basis of, among other things, efficacy, safety, price and the availability of reimbursement from government and other third-party payors. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are viewed as safer, more convenient or less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for our current product candidates or any other future product candidate, which could result in our competitors establishing a strong market position before we are able to enter the market.

Government Regulation

The FDA and other regulatory authorities at federal, state, and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring, and post-approval reporting of biologics such as those we are developing. Along with third-party contractors, we will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval or licensure of its current or future product candidates. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources.

The process required by the FDA before biologic product candidates may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies performed in accordance with the FDA's current Good Laboratory Practices, or GLP, regulation;
- submission to the FDA of an IND, which must become effective before clinical trials may begin and must be updated annually or when significant changes are made;
- approval by an independent Institutional Review Board, or IRB, or ethics committee at each clinical site before the trial is begun;
- performance of adequate and well-controlled human clinical trials to establish the safety, purity and potency of the proposed biologic product candidate for its intended purpose;
- preparation of and submission to the FDA of a Biologics License Application, or BLA, after completion of all pivotal clinical trials;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the proposed product is produced to assess compliance with current Good Manufacturing Practices, or cGMP, and to assure that the facilities, methods and controls are adequate to preserve the biological product's continued safety, purity and potency, and of selected clinical investigations to assess compliance with current Good Clinical Practices, or cGCP; and
- FDA review and approval of the BLA to permit commercial marketing of the product for particular indications for use in the United States, which must be updated annually when significant changes are made.

The testing and approval process requires substantial time, effort and financial resources, and, or cGCP, we cannot be certain that any approvals for our current or future product candidates will be granted on a timely basis, if at all. Prior to beginning the first clinical trial with a product candidate, we must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general

investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with cGCP, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site and must monitor the clinical trial until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical trial sponsor, known as DSMB, which provides authorization for whether or not a clinical trial may move forward at designated check points based on access to certain data from the clinical trial and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical trial results to public registries.

For purposes of BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- **Phase 1** —The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- **Phase 2** —The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- **Phase 3** —The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.
- **Phase 4** —In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be made a condition to approval of the BLA.

Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within a specified period, if at all, and there can be no assurance that the data collected will support FDA approval or licensure of the product. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

BLA Submission and Review by the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. The BLA must include all relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by investigators. The submission of a BLA requires payment of a substantial user fee to FDA, and the sponsor of an approved BLA is also subject to annual product and establishment user fees. These fees are typically increased annually. A waiver of user fees may be obtained under certain limited circumstances.

Once a BLA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after the FDA accepts the application for filing. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed, or held meets standards designed to assure the product's continued safety, purity and potency. The FDA may convene an advisory committee to provide clinical insight on application review questions. Before approving a BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with cGCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or at all, and we may encounter difficulties or unanticipated costs in its efforts to secure necessary governmental approvals, which could delay or preclude us from marketing its products. After the FDA evaluates a BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may request additional information or clarification. The FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the BLA with a Risk Evaluation and Mitigation Strategy, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization and may limit further marketing of the product based on the results of these post-marketing studies. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

[Table of Contents](#)

A sponsor may seek approval of its product candidate under programs designed to accelerate FDA's review and approval of new drugs and biological products that meet certain criteria. Specifically, new drugs and biological products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. For a product candidate with Fast Track designation, the FDA may consider sections of the BLA for review on a rolling basis before the complete application is submitted if relevant criteria are met. A Fast Track designated product candidate may also qualify for priority review, under which the FDA sets the target date for FDA action on the BLA at six months after the FDA accepts the application for filing. Priority review is granted when there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. If criteria are not met for priority review, the application is subject to the standard FDA review period of 10 months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval. We have obtained Fast Track designation for GPS in AML, MPM, and NeuVax.

Under the Accelerated Approval program, the FDA may approve a BLA on the basis of either a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Post-marketing studies or completion of ongoing studies after marketing approval are generally required to verify the biologic's clinical benefit in relationship to the surrogate endpoint or ultimate outcome in relationship to the clinical benefit.

In addition, a sponsor may seek FDA designation of its product candidate as a Breakthrough Therapy, if the product candidate is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application. Breakthrough designation also allows the sponsor to file sections of the BLA for review on a rolling basis. We plan to seek designation as a breakthrough therapy for GPS in one or more indications.

Fast Track, Priority Review and Breakthrough Therapy designations do not change the standards for approval but may expedite the development or approval process.

Orphan Drugs

Under the Orphan Drug Act, the FDA may grant Orphan Drug Product Designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. Orphan Drug Product Designation must be requested before submitting a BLA. After the FDA grants Orphan Drug Product Designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has Orphan Drug Product Designation subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of Orphan Drug Product Designation are tax credits for certain research and a waiver of the BLA application user fee.

A drug with Orphan Drug Product Designation may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received Orphan Drug Product Designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. We plan to seek Orphan Drug Product Designation for GPS in specific orphan indications in which there is a medically plausible basis for the use of GPS for such indications, if applicable. We have obtained Orphan Drug Product Designation for GPS in AML and MPM and for GALE-301 and one for GALE-302.

Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data. Biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon our third-party manufacturers and us. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance. We cannot be certain that we or our present or future suppliers will be able to comply with the cGMP regulations and other FDA regulatory requirements. If we or our present or future suppliers are not able to comply with these requirements, the FDA may, among other things, halt our clinical trials, require us to recall a product from distribution, or withdraw approval of the BLA.

We rely, and expect to continue to rely, on third parties for the production of clinical quantities of our product candidates and we expect to rely in the future on third parties for the production of commercial quantities. Future FDA and state inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production, distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

[Table of Contents](#)

The FDA closely regulates the marketing, labeling, advertising and promotion of biologics. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturers' communications on the subject of off-label use of their products.

Other Healthcare Laws and Compliance Requirements

Our sales, promotion, medical education and other activities following product approval will be subject to regulation by numerous regulatory and law enforcement authorities in the United States in addition to FDA, including potentially the Federal Trade Commission, the Department of Justice, the Centers for Medicare and Medicaid Services, other divisions of the Department of Health and Human Services and state and local governments. Our promotional and scientific/educational programs must comply with the federal Anti-Kickback Statute, the Foreign Corrupt Practices Act, the False Claims Act, or FCA, the Veterans Health Care Act, physician payment transparency laws, privacy laws, security laws, and additional state laws similar to the foregoing.

The federal Anti-Kickback Statute prohibits, among other things, the offer, receipt, or payment of remuneration in exchange for or to induce the referral of patients or the use of products or services that would be paid for in whole or part by Medicare, Medicaid or other federal health care programs. Remuneration has been broadly defined to include anything of value, including cash, improper discounts, and free or reduced price items and services. The government has enforced the Anti-Kickback Statute to reach large settlements with healthcare companies based on sham research or consulting and other financial arrangements with physicians. Further, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. Many states have similar laws that apply to their state health care programs as well as private payors.

The FCA, imposes liability on persons who, among other things, present or cause to be presented false or fraudulent claims for payment by a federal health care program. The FCA has been used to prosecute persons submitting claims for payment that are inaccurate or fraudulent, that are for services not provided as claimed, or for services that are not medically necessary. Actions under the FCA may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the FCA can result in significant monetary penalties and treble damages. The federal government is using the FCA, and the accompanying threat of significant liability, in its investigation and prosecution of pharmaceutical and biotechnology companies throughout the country, for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multibillion dollar settlements under the FCA in addition to individual criminal convictions under applicable criminal statutes. In addition, companies have been forced to implement extensive corrective action plans, and have often become subject to consent decrees or corporate integrity agreements, restricting the manner in which they conduct their business. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, also created federal criminal statutes that prohibit, among other things, knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Given the significant size of actual and potential settlements, it is expected that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

[Table of Contents](#)

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians and other healthcare providers. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Affordable Care Act, among other things, imposed new reporting requirements on drug manufacturers for payments or other transfers of value made by them to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit required information may result in civil monetary penalties. Certain states also mandate implementation of commercial compliance programs, impose restrictions on drug manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians and other healthcare professionals.

We may also be subject to data privacy and security regulation by both the federal government and the states in which it conducts its business. HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and their respective implementing regulations, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect.

If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to it, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Also, the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business. We cannot assure you that our internal control policies and procedures will protect us from reckless or negligent acts committed by our employees, future distributors, partners, collaborators or agents. Violations of these laws, or allegations of such violations, could result in fines, penalties or prosecution and have a negative impact on our business, results of operations and reputation.

Coverage and Reimbursement

Sales of pharmaceutical products depend significantly on the availability of third-party coverage and reimbursement. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. Although we currently believe that third-party payors will provide coverage and reimbursement for our product candidates, if approved, these third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. We may need to conduct expensive clinical studies to demonstrate the comparative cost-effectiveness of its products. GPS for the indications that we develop may not be considered cost-effective. It is time consuming and expensive for us to seek coverage and reimbursement from third-party payors. Moreover, a payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

Healthcare Reform

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

[Table of Contents](#)

By way of example, in March 2010, the Affordable Care Act was signed into law, intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Efforts to replace or repeal the Affordable Care Act have been repeatedly made, and we cannot know how any legislation that may be passed to repeal or replace the Affordable Care Act will impact our business and potential future business.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013, which will remain in effect through 2024 unless additional congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our product candidates, if approved for one or more indications, and, accordingly, our financial operations.

We expect that the Affordable Care Act, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of its products to the extent we choose to develop or sell any products outside of the United States. The approval process varies from country to country and the time may be longer or shorter than that required to obtain FDA approval. Additionally, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

In the European Union, member states require both regulatory clearances by the national competent authority and a favorable ethics committee opinion prior to the commencement of a clinical trial. Under the European Union regulatory systems, marketing authorization applications may be submitted under either a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. It is compulsory for medicines produced by certain biotechnological processes. Because our products are produced in that way, we would be subject to the centralized procedure. Under the centralized procedure, pharmaceutical companies submit a single marketing authorization application to the EMA. Once granted by the European Commission, a centralized marketing authorization is valid in all European Union member states, as well as the European Economic Area countries Iceland, Liechtenstein and Norway. By law, a company can only start to market a medicine once it has received a marketing authorization.

Corporate Information

Our principal executive offices are located at 315 Madison Avenue, 4th Floor, New York, NY 10017, and our phone number is (917) 438-4353. Our website address is www.sellaslife.com. We do not incorporate the information on our website into this annual report on Form 10-K, and you should not consider such information part of this annual report on Form 10-K.

We were incorporated on April 3, 2006 in Delaware as Argonaut Pharmaceuticals, Inc. On November 28, 2006, we changed our name to RXi Pharmaceuticals Corporation and began operations January 2007. On September 26, 2011, we changed our name to Galena Biopharma, Inc. In December 2017, we completed the Merger with Private SELLAS and changed our name to “SELLAS Life Sciences Group, Inc.”

ITEM 1A. RISK FACTORS

You should consider carefully the risks and uncertainties described below, together with all of the other information in this annual report on Form 10-K. We operate in a dynamic and rapidly changing industry that involves numerous risks and uncertainties. The risks and uncertainties described below are not the only ones we face. Other risks and uncertainties, including those that we do not currently consider material, may impair our business. If any of the risks discussed below actually occur, our business, financial condition, operating results or cash flows could be materially adversely affected. This annual report on Form 10-K also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks we face as described below and elsewhere in this annual report on Form 10-K.

Risks Relating to Our Financial Position and Capital Needs

We have incurred substantial losses since our inception and anticipate that we will continue to incur substantial and increasing losses for the foreseeable future.

We are a clinical-stage biopharmaceutical company focused on development of novel cancer immunotherapies for a broad range of cancer indications. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that a product candidate will fail to prove effective, gain regulatory approval or become commercially viable. We do not have any products approved by regulatory authorities and have not generated any revenues from collaboration and licensing agreements or product sales to date, and have incurred significant research, development and other expenses related to our ongoing operations and expect to continue to incur such expenses. As a result, we have not been profitable and have incurred significant operating losses in every reporting period since our inception. For the years ended December 31, 2017 and 2016, we reported a net loss of \$23.8 million and \$17.7 million, respectively, and as of December 31, 2017 and 2016, had an accumulated deficit of \$54.2 million and \$30.4 million, respectively.

We do not expect to generate revenues for many years, if at all. We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate these losses to increase as we continue to research, develop and seek regulatory approvals for our product candidates and any additional product candidates we may acquire, and potentially begin to commercialize product candidates that may achieve regulatory approval. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. If any of our product candidates fail in clinical trials or do not gain regulatory approval, or if approved, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. We anticipate that our expenses will increase in the future as we continue to invest in research and development of our existing product candidates, investigate and potentially acquire new product candidates and expand our manufacturing and commercialization activities.

There is substantial doubt about our ability to continue as a going concern.

As of December 31, 2017, we had a cash balance of approximately \$2.3 million and restricted cash of \$10.4 million. In addition, we had outstanding accounts payable and accrued expenses of \$14.9 million and an outstanding principal amount of \$10.2 million as of December 31, 2017, which consists of our senior secured debenture with JGB (Cayman) Newton Ltd, or JGB, that is due November 2018. The outstanding principal amount is maintained in a restricted cash. We expect our existing cash as of December 31, 2017, together with the \$6.0 million of proceeds from the initial closing of our private placement of Series A 20% convertible preferred stock, or Series A Convertible Preferred, and warrants in March 2018, will enable us to fund our operating expenses and capital expenditure requirements through June 2018. Assuming that all conditions to the initial closing are met, we expect an additional \$4.7 million of cash proceeds from the second closing of the sale of our Series A Convertible Preferred and warrants in the second quarter of 2018. Accordingly, our management concluded that these matters raise substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our auditors have included an explanatory paragraph in their audit report for this uncertainty. If we cannot continue as a viable entity, our securityholders may lose some or all of their investment in us.

We may fail to realize the anticipated benefit of the Merger.

Our ability to achieve our business objectives and raise the necessary capital to fund our operations, including the successful development of our current and future product candidates, has substantial risk. If we are not able to achieve these objectives, the anticipated benefit of the Merger may not be realized fully, may take longer to realize than expected, or may not be realized at all.

It is possible that the integration and transition process could result in the loss of key employees, the disruption of our ongoing business, an adverse impact on the value of the our assets, or inconsistencies in standards, controls, procedures or policies that could adversely affect our ability to comply with reporting obligations as a public company, an inability to satisfy our obligations to third parties or to achieve the anticipated benefit of the Merger, or an inability to raise the necessary capital to fund our operations. Integration efforts between the two companies will also divert management's attention and resources. Any delays in the integration process or inability to realize the full extent of the anticipated benefit of the Merger could have an adverse effect on our business and the results of our operations. Such an adverse effect may impact the value of the shares of the our common stock.

Potential difficulties that may be encountered in the integration process include, among other things, the following:

- raising sufficient capital to fund our operations and current clinical programs;
- using our cash and other assets efficiently to develop our business;
- appropriately managing our liabilities;
- loss of key employees;
- potential unknown or currently unquantifiable liabilities associated with the Merger and our business operations; and
- performance shortfalls at one or both of the companies as a result of the diversion of management's attention caused by completing the Merger and integrating the companies' operations.

We will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

We expect to expend substantial resources for the foreseeable future to continue the clinical development and manufacturing of GPS, our WT1 peptide cancer immunotherapy product candidate exclusively licensed from MSK, the clinical development of our other product candidates including NeuVax, GALE-301 and GALE-302, and the advancement and expansion of our preclinical research pipeline. These expenditures will include costs associated with research and development, potentially acquiring new product candidates or technologies, conducting preclinical studies and clinical trials and potentially obtaining regulatory approvals and manufacturing products, as well as marketing and selling products approved for sale, if any. Under the terms of our amended and restated license agreement with MSK, we are obligated to make royalty payments and payments upon the achievement of certain development and commercial milestones in addition to paying guaranteed annual minimum royalties, sponsoring research and making other guaranteed payments to MSK. In addition, other unanticipated costs may arise. Further, under the terms of the amended and restated MSK license agreement, we are required to obtain \$25.0 million of financing by December 31, 2018, and if such financing conditions are not met, MSK has the right to terminate with prior written notice, unless we cure during the notice period. We are agreed to fund the NeuVax programs in the amount of \$3.0 million. Moreover, we have additional payment obligations under our BioVascular license agreement. Because the design and outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our current or future product candidates.

[Table of Contents](#)

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates if clinical trials are successful;
- the cost of commercialization activities for our product candidates, if any of these product candidates is approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our product candidates for clinical trials in preparation for regulatory approval;
- our ability to establish and maintain strategic licensing or other arrangements and the financial terms of such agreements;
- the costs associated with current in-licensed product candidates;
the costs to in-license future product candidates or technologies;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the costs in defending and resolving current derivative and securities class action litigation;
- our operating expenses; and
- the timing, receipt and amount of sales of, or royalties on, our future products, if any; and
- the emergence of competing technologies or other adverse market developments.

We expect our existing cash as of December 31, 2017, together with the proceeds from the initial closing of our Series A Convertible Preferred in March 2018, will enable the us to fund our planned operations through June 2018. Assuming that all conditions to the initial closing are met, we expect an additional \$4.7 million of cash proceeds from the second closing of the sale of our Series A Convertible Preferred and warrants in the second quarter of 2018. However, our operating plan may change as a result of many factors currently unknown to us, and we may need additional funds sooner than planned. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. We have only one limited committed external source of funds. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate preclinical studies, clinical trials or other development activities for one or more of our product candidates or target indications, or delay, limit, reduce or terminate our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates.

We currently have no source of revenues. We may never generate revenues or achieve profitability.

Currently, we do not generate any revenues from product sales or otherwise. Even if we are able to successfully achieve regulatory approval for our product candidates, we do not know when we will generate revenues or become profitable, if at all. Our ability to generate revenues from product sales and achieve profitability will depend on our ability to successfully commercialize products, including our current product candidate, and other product candidates that we may develop, in-license or acquire in the future. Our ability to generate revenues and achieve profitability also depends on a number of additional factors, including our ability to:

- successfully complete development activities, including the necessary clinical trials;
- complete and submit either BLAs, or NDAs to the FDA, and obtain United States regulatory approval for indications for which there is a commercial market;

[Table of Contents](#)

- complete and submit applications to, and obtain regulatory approval from, foreign regulatory authorities in Europe, Asia and other jurisdictions;
- obtain coverage and adequate reimbursement from third parties, including government and private payors;
- set commercially viable prices for our products, if any;
- establish and maintain supply and manufacturing relationships with reliable third parties and/or build our own manufacturing facility and ensure adequate, legally globally compliant manufacturing of bulk drug substances and drug products to maintain that supply;
- develop manufacturing and distribution processes for our product candidate;
- develop commercial quantities of our product candidates, once approved, at acceptable cost levels;
- achieve market acceptance of our products, if any;
- attract, hire and retain qualified personnel;
- protect our rights in our intellectual property portfolio;
- develop a commercial organization capable of sales, marketing and distribution for any products we intend to sell ourselves, in the markets in which we choose to commercialize on our own; and
- find suitable distribution partners to help us market, sell and distribute our approved products in other markets.

Our revenues for any product candidate for which regulatory approval is obtained will be dependent, in part, upon the size of the markets in the territories for which it gains regulatory approval, the accepted price for the product, the ability to get reimbursement at any price, and whether we own the commercial rights for that territory. If the number of our addressable disease patients is not as significant as our estimates, the indication approved by regulatory authorities is narrower than we expect, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenues from sales of such products, even if approved. In addition, we anticipate incurring significant costs associated with commercializing any approved product candidate. As a result, even if we generate revenues, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and may be forced to reduce our operations.

Following the Merger, our business and management is largely that of Private SELLAS, which has a limited operating history. This may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

Private SELLAS was formed in January 2012. Its operations prior to the Merger were limited to organizing and staffing its company, acquiring product and technology rights and conducting product development activities for its product candidate GPS. As a combined company, we have not yet demonstrated our ability to start or successfully complete any Phase 3 clinical trials, obtain regulatory approval, manufacture a commercial scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization for any of our product candidates. In addition, the adoptive cancer immunotherapy technology underlying our peptide cancer immunotherapy product candidate is new and largely unproven. Any predictions about our future success, performance or viability, particularly in view of the rapidly evolving cancer immunotherapy field, may not be as accurate as they could be if we had a longer operating history as a combined company or approved products on the market.

[Table of Contents](#)

In addition, our management team is largely composed of Private SELLAS who have limited experience of operating as an United States public company. We may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition at some point from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition. We expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, any of our interim or annual periods' results are not indicative of future operating performance.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our product candidates on unfavorable terms to us.

We may seek additional capital through a variety of means, including through private and public equity offerings and debt financings. To the extent that we raise additional capital through the sale of equity or convertible debt securities, or through the issuance of shares under management or other types of contracts, or upon exercise or conversion of outstanding derivative securities, the ownership interest of our stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect our rights as a stockholder. Debt financing, if available, may involve additional agreements similar to those that we have in place under our senior secured debenture with JGB, and could include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures, entering into licensing arrangements, or declaring dividends. If we raise additional funds from third parties, we may have to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds through equity or debt financing when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts for our product candidates, or grant to others the rights to develop and market product candidates that we would otherwise prefer to develop and market.

We expect to continue to incur significant operating and non-operating expenses, which may make it difficult for us to secure sufficient financing and may lead to uncertainty about our ability to continue as a going concern.

Substantial funds were expended to develop our technologies and product candidates, and additional substantial funds will be required for further preclinical testing and clinical trials of our product candidates, and to manufacture and market any products that are approved for commercial sale. Because the successful development of our products is uncertain, we are unable to precisely estimate the actual funds we will require to develop and potentially commercialize them. In addition, we may not be able to generate enough revenue, even if we are able to commercialize any of our product candidates, to become profitable.

In the event that we are unable to obtain additional financing if needed or if we incur significant expense related to the resolution of the ongoing government investigation, we may not be able to meet our obligations as they come due, that in turn may raise substantial doubts as to our ability to continue as a going concern. Any such inability to continue as a going concern may result in our common stock holders losing their entire investment. There is no guaranty that we will be able to secure additional financing if we need such financing. Our financial statements contemplate that we will continue as a going concern and do not contain any adjustments that might result if we were unable to continue as a going concern. Changes in our operating plans, our existing and anticipated working capital needs, defense costs related to the recent securities and derivative lawsuits, the acceleration or modification of our development activities, any near-term or future expansion plans, increased expenses, potential acquisitions or other events may affect our ability to continue as a going concern. Future financing may be obtained through, and future development efforts may be paid for by, the issuance of debt or equity, which may have an adverse effect on our security holders or may otherwise adversely affect our business.

If we raise funds through the issuance of debt or equity, any debt securities or preferred stock issued will have rights, preferences and privileges senior to those of holders of our common stock in the event of a liquidation. In such event, there is a possibility that once all senior claims are settled, there may be no assets remaining to pay out to the holders of common stock. In addition, if we raise funds through the issuance of additional equity, whether through private placements or additional public offerings, such an issuance would dilute our security holders.

We are, and in the future may be, subject to legal or administrative actions that could adversely affect our financial condition and our business.

Our predecessor company, Galena was involved in multiple legal proceedings and administrative actions, including stockholder class actions, both state and federal, some of which are ongoing and to which we are now subject as a result of the Merger. These legal and administrative actions, which we refer to as the Galena Legacy Matters, included allegations relating to federal securities law violations, claims under the False Claims Act, claims regarding breaches of contract, and other stockholder allegations, including claims of breaches of fiduciary duty by our former directors. In addition, on or about April 9, 2018, JGB filed a lawsuit in the U.S. District Court for the Southern District of New York. The complaint asserts claims under state law and federal securities law against us, our Chief Executive Officer and our Interim Chief Financial Officer relating to a debenture agreement between JGB and us. These matters are described in Item 3 “Legal Proceedings” of this annual report on Form 10-K. These legal and administrative proceedings require our management and board of directors to devote a significant amount of time and resources to defending such claims and addressing such allegations, rather than focusing on executing on our business plans and operations. The settlement of the Galena Legacy Matters has resulted in substantial payments, some of which have not been covered by our insurance policies. We may continue to incur substantial unreimbursed legal fees and other expenses in connection with the Galena Legacy Matters, the JGB lawsuit or other future legal and regulatory proceedings that may not qualify for coverage under, or may exceed the limit of, our applicable directors and officers liability insurance policies and could have a material adverse effect on our financial condition, liquidity, and results of operations. An unfavorable outcome in any of these matters could damage our business and reputation or result in additional claims or proceedings against us. Moreover, in addition to these ongoing and prior matters, we may be exposed to claims as a result of the Merger, or other legal or administrative actions in the future, which could result in the payment of additional amounts and have a material adverse effect on our financial condition and results of operations. We can make no assurances as to the time or resources that will need to be devoted to these matters or their outcome, or the impact, if any, that these matters or any resulting legal or administrative proceedings may have on our business or financial condition but any further action in respect of any such matter by a governmental agency could have a material adverse effect on our results of operation and our business and prospects. Please read Item 3 “Legal Proceedings” of this annual report on Form 10-K for more information regarding our legal and administrative proceedings.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law new legislation that significantly revises the Internal Revenue Code of 1986, as amended. The newly

enacted federal income tax law, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%,

[Table of Contents](#)

limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits (including reduction of tax credits under the Orphan Drug Act). Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law.

Our ability to use net operating losses to offset future taxable income may be subject to limitations.

As of December 31, 2017, we had federal and state net operating loss, or NOL, carryforwards of \$7.4 million. The federal and state NOL carryforwards will begin to expire, if not utilized, beginning in 2027. These NOL carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted federal income tax law, federal NOLs incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal NOLs is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation’s ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. The Merger constituted an ownership change and as such, our ability to use our NOL carryforwards is materially limited, which may harm our future operating results by effectively increasing our future tax obligations.

Risks Relating to Our Former Commercial Operations

We are subject to U.S. federal and state health care fraud and abuse and false claims laws and regulations, and we recently have been subpoenaed in connection with marketing and promotional practices related to Abstral® (fentanyl) sublingual tablets. Prosecutions under such laws have increased in recent years and we may become subject to such prosecutions or related litigation under these laws. If we have not fully complied with such laws, we could face substantial penalties.

Our former commercial operations and development programs are subject to various U.S. federal and state fraud and abuse laws, including, without limitation, the federal False Claims Act, federal Anti-Kickback Statute, and the federal Sunshine Act. A federal investigation led by the U.S. Attorney’s Office for the Southern District of Alabama, or the SDAL, of two of the high-prescribing physicians for Abstral (fentanyl) sublingual tablets resulted in the criminal prosecution of the two physicians for alleged violations of the federal False Claims Act and other federal statutes. On April 28, 2016, a second superseding indictment was filed in the criminal case, which added additional information about the defendant physicians and provided information regarding the facts and circumstances involving a rebate agreement between us and the defendant physicians’ pharmacy as well as their ownership of our common stock. The criminal trial, which began on January 4, 2017, concluded with a jury verdict on February 23, 2017 finding these physicians guilty on 19 of 20 counts. In May 2017, one physician was sentenced to 20 years in prison, and the other physician was sentenced to 21 years in prison. At the end of the SDAL case, SDAL dismissed count 18 of the indictment charging that the physicians conspired, through the C&R Pharmacy, to receive illegal kickbacks in exchange for prescribing Abstral. To our knowledge, we were not a target or subject of that investigation. We have also received a subpoena from the U.S. Attorney’s Office for the Southern District of New York in February 2018, seeking documents related to specific physicians. To our knowledge, we are not a target or subject of that investigation.

There have also been federal and state investigations of companies that have products that are in the same therapeutic class as Abstral, and we have learned that the FDA, and other governmental agencies were investigating our Abstral promotion practices. In December 2015, we announced we had received a subpoena from the U.S. Attorney’s Office for the District of New Jersey, or the USAO NJ, requesting the production of a broad range of documents pertaining to marketing and promotional practices related to Abstral, a product which we sold to Sentyln Therapeutics Inc. for aggregate gross

[Table of Contents](#)

consideration of \$12 million in November 2015. In January 2016, we announced that the USAO NJ and the Department of Justice, or DOJ, were conducting a criminal and civil investigation of us, as well as, possibly one or more then-current and/or former employees. On September 8, 2017, DOJ announced a settlement agreement with our company regarding the USAO NJ and DOJ's investigation. The settlement involves a non-criminal resolution agreement and a civil payment of approximately \$7.551 million, plus interest accrued since the date of reaching an agreement in principle payable in equal installments over twelve months, in return for a release of government claims of our company in connection with the investigation. The civil payment was fully paid by us on or about December 29, 2017.

We may be subject to additional legal or administrative actions as a result of these matters, or the impact of such matters. If we are found to be in violation of the False Claims Act, Anti-Kickback Statute, Patient Protection and Affordable Care Act, or any other applicable state or any federal fraud and abuse laws, we may be subject to penalties, such as civil and criminal penalties, damages, fines, or an administrative action of exclusion from government health care reimbursement programs. We can make no assurances as to the time or resources that will need to be devoted to these matters or outcomes, or the impact, if any, that these matters or any resulting legal or administrative proceedings may have on our business or financial condition.

Many of the regulatory provisions that we are subject to include criminal provisions. If we are unable to comply with these provisions in the operation of our business we may become subject to civil and criminal investigations and proceedings that could have a material adverse effect on our business, financial condition and prospects.

The federal False Claims Act prohibits persons from knowingly filing, or causing to be filed, a false claim to, or the knowing use of false statements to obtain payment from, the federal government. Qui tam lawsuit filed under the False Claims Act can be brought by any individual on behalf of the government and such individuals, commonly known as "relators" or "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The frequency of filing qui tam actions has increased significantly in recent years, causing greater numbers of health care companies to have to defend such qui tam actions and pay substantial sums to settle such actions. A qui tam action had been filed against us and others as described in the settlement agreement with DOJ and USAO NJ. As set forth in that settlement agreement, for a release of all claims against us and our officers and directors and dismissal with prejudice of the qui tam lawsuit, the relator received a portion of the \$7.551 million payment to the federal government. As a result of the payment of the settlement amount, the federal government and the relator will dismiss with prejudice their claims against us in the qui tam lawsuit. In a separate settlement agreement, we paid \$0.30 million in cash to the relator's counsel for the statutory mandated attorney's fees. The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving, or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal health care program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal health care covered business, the statute has been violated. The Anti-Kickback Statute is broad, and despite a series of narrow safe harbors, prohibits many arrangements and practices that are lawful in businesses outside of the health care industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil and administrative sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal health care programs. An alleged violation of the Anti-Kickback Statute may be used as a predicate offense to establish liability pursuant to other federal laws and regulations such as the federal False Claims Act. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for health care items or services reimbursed by any source, not only Medicare and Medicaid programs.

The federal Patient Protection and Affordable Care Act includes provisions expanding the ability of certain relators to bring actions that would have been dismissed under prior law. When an entity is determined to have violated the federal False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim. The Deficit Reduction Act of 2005 encouraged states to enact or modify their state false claims acts to be at least as effective as the federal False Claims Act by granting states a portion of any federal Medicaid funds recovered through Medicaid-related actions. Most states have enacted state false claims laws, and many of those states included laws including qui tam provisions. The federal Patient Protection and Affordable Care Act includes provisions known as the Physician Payments Sunshine Act, which requires manufacturers of drugs, biologics, devices and medical

[Table of Contents](#)

supplies covered under Medicare and Medicaid to record any transfers of value to physicians and teaching hospitals and to report this data beginning in 2013 to the Centers for Medicare and Medicaid Services for subsequent public disclosures. Manufacturers must also disclose investment interests held by physicians and their family members. Failure to submit the required information may result in civil monetary penalties of up to \$1 million per year for knowing violations and may result in liability under other federal laws or regulations. Similar reporting requirements have also been enacted on the state level in the United States, and an increasing number of countries worldwide either have adopted or are considering similar laws requiring transparency of interactions with health care professionals. In addition, some states such as Massachusetts and Vermont imposed an outright ban on certain gifts to physicians. These laws could affect our product promotional activities by limiting the kinds of interactions we could have with hospitals, physicians or other potential purchasers or users of our system. Both the disclosure laws and gift bans also will impose administrative, cost and compliance burdens on us.

We face product liability exposure and, if successful claims are brought against us, we may incur substantial liability if our insurance coverage for those claims is inadequate.

The commercial sale of our products after we are approved as well as the use of our product candidates in clinical trials exposes us to possible product liability claims. This risk exists even if a product is approved for commercial sale by the FDA and manufactured in facilities licensed and regulated by the FDA, if our products were sold to third parties, or if our products are provided in clinical trials. Our products are designed to affect important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with our products could result in injury to a patient or even death. For example, because the placebo may have performed better than NeuVax in the PRESENT (**P** revention of **R** eurrence in **E** arly- **S** tage, Node-Positive Breast Cancer with Low to Intermediate HER2 **E** xpression with **N** euVax **T** reatment) Trial, the use of NeuVax may have worsened the patient's condition.

Product liability claims may be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products or generic versions of our products. If we cannot successfully defend ourselves against product liability claims we could incur substantial liabilities. Because we have sold Abstral and Zuplenz (ondansetron) oral soluble film and provided NeuVax as a study drug in the PRESENT Trial and other clinical trials, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- costs of related litigation;
- distraction of management's attention from our primary business; or
- substantial monetary awards to patients or other claimants.

We have obtained product liability insurance coverage for commercial product sales with a \$10 million per occurrence and a \$10 million annual aggregate coverage limit. Our insurance coverage may not be sufficient to cover all of our product liability related expenses or losses and may not cover us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost, in sufficient amounts or upon adequate terms to protect us against losses due to product liability. If we determine that it is prudent to increase our product liability coverage based on sales of our products, we may be unable to obtain this increased product liability insurance on commercially reasonable terms or at all. Large judgments have been awarded in class action or individual lawsuit based on drugs that had unanticipated side effects, including side effects that may be less severe than those of our products. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and have a material adverse effect on our business, results of operations, financial condition and prospects.

Our business involves the use of hazardous materials and we and our third-party manufacturers and suppliers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our third-party manufacturers and suppliers activities involve the controlled storage, use and disposal of hazardous materials. We and our manufacturers and suppliers are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials even after we sell or otherwise dispose of the products. In some cases, these hazardous materials and various wastes resulting from their use will be stored at our contractors or manufacturers' facilities pending use and disposal. We cannot completely eliminate the risk of contamination, which could cause injury to our employees and others, environmental damage resulting in costly cleanup and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we expect that the safety procedures utilized by our third-party contractors and manufacturers for handling and disposing of these materials will generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this will be the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources. We do not currently carry biological or hazardous waste insurance coverage and our property and casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination.

We will continue to be responsible for certain liabilities and obligations related to Abstral and Zuplenz, and if unknown liabilities were to arise it could have a material adverse effect on us.

Under our respective asset purchase agreements with Sentyln Therapeutics, Inc. and Midatech Pharma PLC, our future obligations under our former agreements with Orexo AB and MonoSol Rx have been assumed by Sentyln and Midatech, respectively, except that we will continue to be responsible for chargebacks, rebates, patient assistance and certain other product distribution channel liabilities related to Abstral and Zuplenz for a specified period of time post-closing. With respect to Zuplenz, we will continue to be responsible for any downstream returns from end user customers or returns from wholesalers from inventory existing as of December 24, 2015 that was sold by us prior to December 24, 2015. As presently believed by us, responsibilities to Sentyln and Midatech are not material, but if substantial unknown liabilities were to arise, it could have a material adverse effect on our financial condition. In this regard, we have been advised by one of our wholesale customers that Zuplenz inventory held by that customer under an alleged agreement with us is approaching our expiration date and needs to be swapped with better dated Zuplenz product. We have settled the swap by us paying the customer \$0.50 million on October 24, 2017. Midatech has advised us that the same Zuplenz inventory is reaching our expiration date and will be returned. Under the terms of the asset purchase agreement, Midatech maintained that the cost of the return is \$1.5 million and we need to pay Midatech for the return. Midatech has since withdrawn that claim. We believe the settlement with the customer has resolved any return issues with Midatech without additional cost to us. However, no assurance can be given that we will not face additional liabilities under these asset purchase agreements.

Risks Related to the Development of Our Product Candidates

We are currently a clinical-stage biopharmaceutical company with product candidates in clinical development. If we are unable to successfully develop and commercialize product candidates or experiences significant delays in doing so, our business may be materially harmed.

We are currently a clinical-stage biopharmaceutical company with product candidates in clinical development. We have invested substantially all of our efforts and financial resources in identifying and developing potential product candidates and conducting preclinical studies, clinical trials and manufacturing activities. Our ability to generate revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following:

- completion of preclinical studies and clinical trials with positive results;
- receipt of regulatory approvals from applicable authorities;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;

[Table of Contents](#)

- establishing or making arrangements with third-party manufacturers or building our own manufacturing facility for commercial manufacturing purposes;
- developing manufacturing and distribution processes for our novel WT1 peptide cancer immunotherapy product candidate and other product candidates;
- manufacturing our product candidates at an acceptable cost;
- launching commercial sales of our product candidates, if approved, whether alone or in collaboration with others;
- acceptance of our product candidates, if approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage and adequate reimbursement by third-party payors, including government payors, for our product candidates;
- protecting our rights in our intellectual property portfolio;
- maintaining a continued acceptable safety profile of the products following approval; and
- maintaining and growing an organization of scientists and business people who can develop and commercialize our products and technology.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully develop and commercialize our product candidates, which could materially harm our business.

Our future success is dependent on the regulatory approval of our product candidates.

Our business is substantially dependent on our ability to obtain regulatory approval for, and, if approved, to successfully commercialize our product candidates in a timely manner. We cannot commercialize product candidates in the United States without first obtaining regulatory approval for the product from the FDA; similarly, we cannot commercialize product candidates outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities. Before obtaining regulatory approvals for the commercial sale of any product candidate for a target indication, we must demonstrate with substantial evidence gathered in preclinical studies and clinical trials, generally including two well-controlled Phase 3 trials, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate with respect to such product candidate.

The time required to obtain approval by the FDA and comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that our existing product candidate or any future product candidates will ever obtain regulatory approval.

Our current and future product candidates could fail to receive regulatory approval from the FDA or a comparable foreign regulatory authority for many reasons, including:

- disagreement with the design or implementation of our clinical trials;
- failure to demonstrate that a product candidate is safe and effective for our proposed indication;
- failure of clinical trials to meet the level of statistical significance required for approval;

[Table of Contents](#)

- failure to demonstrate that a product candidate's clinical and other benefits outweigh our safety risks;
- disagreement with our interpretation of data from preclinical studies or clinical trials;
- the insufficiency of data collected from clinical trials of our product candidates to support the submission and filing of a BLA, NDA or other submission or to obtain regulatory approval;
- failure to obtain approval of our manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies or our own manufacturing facility; or
- changes in the approval policies or regulations that render our preclinical and clinical data insufficient for approval.

The FDA or a comparable foreign regulatory authority may require more information, including additional preclinical or clinical data to support approval or additional studies, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program. If we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than it requests (including failing to approve the most commercially promising indications), may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate.

Even if a product candidate were to successfully obtain approval from the FDA and comparable foreign regulatory authorities, any approval might contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, or may be subject to burdensome post-approval study or risk management requirements. If we are unable to obtain regulatory approval for one of our product candidates in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding to continue the development of that product or generate revenues attributable to that product candidate. Also, any regulatory approval of our current or future product candidates, once obtained, may be withdrawn.

Our lead product candidate, GPS, represents a new therapeutic approach that presents significant challenges.

Our future success is dependent in part on the successful development of WT1 peptide immunotherapies in general and GPS in particular. Because this program represents a new approach to cancer immunotherapy for the treatment of cancer and other diseases, developing and commercializing GPS subjects us to a number of challenges, including:

- obtaining regulatory approval from the FDA and other regulatory authorities, which have very limited experience with the development and commercialization of WT1 cancer immunotherapies;
- the ability to obtain, store and use the three components required for administration, GPS, GM-CSF, and Montanide;
- training medical personnel regarding the proper preparation of GPS for administration and proper handling thereof once prepared;
- utilizing GPS in combination with other therapies, which may increase the risk of adverse side effects;
- educating medical personnel regarding the potential side effect profile of GPS for each target indication;
- developing processes for the safe administration of GPS, including long-term follow-up for all patients who receive these product candidate;
- sourcing clinical and, if approved, commercial supplies for the materials used to manufacture and process GPS;

[Table of Contents](#)

- developing a manufacturing process and distribution network that can provide a stable supply with a cost of goods that allows for an attractive return on investment;
- establishing sales and marketing capabilities after obtaining any regulatory approval to gain market acceptance, and obtaining adequate coverage, reimbursement and pricing by third-party payors and government authorities; and
- developing therapies for types of diseases beyond those initially addressed by GPS.

We cannot be sure that the manufacturing processes used in connection with GPS will yield a satisfactory product that is safe and effective, scalable or profitable.

Moreover, public perception of safety issues, including adoption of new therapeutics or novel approaches to treatment, may adversely influence the willingness of subjects to participate in clinical trials, or if approved, of physicians to subscribe to the novel treatment mechanics. Physicians, hospitals and third-party payors often are slow to adopt new products, technologies and treatment practices that require additional upfront costs and training. Physicians may not be willing to undergo training to adopt this novel therapy, may decide the therapy is too complex to adopt without appropriate training and may choose not to administer the therapy. Based on these and other factors, hospitals and payors may decide that the benefits of this new therapy do not or will not outweigh our costs.

Our product candidates, NeuVax, GALE-301 and GALE-302 may not be a viable product candidates to prevent the recurrence of breast, ovarian cancer or other types of cancers.

In June 2016, an independent data monitoring committee conducted the pre-planned interim analysis of the PRESENT Trial for NeuVax and recommended that we stop the clinical trial because of futility, as the placebo may have performed better than NeuVax in the PRESENT trial. While there may have been factors about the design of the trial that caused the failure, one factor it may be that NeuVax is not effective as a monotherapy in the treatment of the recurrence of breast cancer. As our product candidates GALE-301 and GALE-302 have a similar mechanism of action to NeuVax, they may no longer be effective product candidates as monotherapies for the prevention of the recurrence of ovarian cancer or other types of cancer.

The results of preclinical studies or earlier clinical trials are not necessarily predictive of future results. Our existing product candidates in clinical trials, and any other product candidates which may advance into clinical trials, may not have favorable results in later clinical trials or receive regulatory approval.

Success in preclinical studies and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of an investigational drug. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience than us, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier preclinical studies or clinical trials. Any of our product candidates which are in, or may advance to, clinical trials may not succeed in clinical trials despite promising pre-clinical data. For example, with respect to GPS, a broadly similar anti-cancer peptide immunotherapeutic against melanoma-specific antigen being developed by GlaxoSmithKline for advanced unresectable melanoma initially produced positive efficacy data in a Phase 2 clinical study, but subsequently failed to prove more beneficial than placebo in a controlled, blinded and randomized Phase 3, registration-enabling clinical trial in the same indication in patients after tumor resection. Despite the results reported in earlier preclinical studies or clinical trials for our product candidates, we do not know whether the clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market GPS or any of our product candidates for a particular indication, either as a monotherapy or in combination, in any particular jurisdiction. Although we are currently studying GPS as a treatment for up to eight types of cancers, only two indications (acute myeloid leukemia, or AML, and malignant pleural mesothelioma, or MPM) have completed Phase 2 clinical trials and have Phase 3 clinical trials planned (pending funding availability). Efficacy data from prospectively designed trials may differ significantly from those obtained from retrospective subgroup analyses. If later-stage clinical trials do not produce favorable results, our ability to achieve regulatory approval for GPS may be adversely impacted. Even if we believe that we have adequate data to support an application for regulatory approval to market any of our current or future product candidates, the FDA or other regulatory authorities may not agree and may require that it conducts additional clinical trials.

We may find it difficult to enroll patients in our clinical trials given the limited number of patients who have the diseases for which our product candidates are being studied. Difficulty in enrolling patients for this or other reasons could delay or prevent clinical trials of our product candidates.

Identifying and qualifying patients to participate in clinical trials of our current and future product candidates is essential to our success. The timing of our clinical trials depends in part on the rate at which we can recruit patients to participate in clinical trials of our product candidates, and we may experience delays in our clinical trials if we encounter difficulties in enrollment.

The eligibility criteria of our planned clinical trials may further limit the available eligible trial participants as we expect to require that patients have specific characteristics that we can measure or meet the criteria to assure their conditions are appropriate for inclusion in our clinical trials. For instance, in our planned AML Phase 3 clinical trial, only patients who meet specific inclusion criteria will enter the study. Primary entry restrictions include being greater than or equal to 60 years of age, having received upfront treatment with chemotherapy agents only, having achieved CRem, as well as demonstrating adequate hematologic recovery. The estimated prevalence of AML is 12,000 to 20,000 cases in the United States (across all ages) and only a subset of this group satisfies the enrollment criteria for our AML Phase 3 clinical trial. We may not be able to identify, recruit, and enroll a sufficient number of patients to complete our clinical trials in a timely manner because of the perceived risks and benefits of the product candidate under study, the availability and efficacy of competing therapies and clinical trials, and the willingness of physicians to participate in our planned clinical trials. If patients are unwilling to participate in our clinical trials for any reason, the timeline for conducting trials and obtaining regulatory approval of our product candidates may be delayed.

If we experience delays in the completion of, or termination of, any clinical trials of our current or future product candidates, the commercial prospects of our product candidates could be harmed, and our ability to generate product revenue from any of these product candidates could be delayed or prevented. In addition, any delays in completing our clinical trials would likely increase our overall costs, impair product candidate development and jeopardize our ability to obtain regulatory approval relative to our current plans. Any of these occurrences may harm our business, financial condition, and prospects significantly.

A number of different factors could prevent us from obtaining regulatory approval or commercializing our product candidates on a timely basis, or at all.

Clinical trials of a drug candidate may be suspended at any time for various reasons, including if we or other regulatory agencies believe the subjects or patients participating in such trials are being exposed to unacceptable health risks. A suspension may come from: us; the FDA or other applicable regulatory authorities; an independent DSMB, governing our clinical trials; or an institutional review board, which is an independent committee registered with and overseen by the U.S. Department of Health and Human Services, or the HHS, that functions to approve, monitor and review biomedical and behavioral research involving humans. Among other reasons, adverse side effects of a drug candidate on subjects or patients in a clinical trial could result in the FDA or other regulatory authorities suspending or terminating the trial and refusing to approve a particular drug candidate for any or all indications of use.

Clinical trials of a new drug candidate require the enrollment of a sufficient number of patients, including patients who are suffering from the disease the drug candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, and delays in patient enrollment can result in increased costs and longer development times than we expect at present. Patients who are enrolled at the outset of the trial may eventually choose for personal reasons not to participate in the study. We also compete for eligible patients with other clinical trials underway, and we may experience delays in patient enrollment due to the dependency of other trials underway in the same patient population.

Clinical trials also require the review and oversight of institutional review boards, which approve and continually review clinical investigations to protect the rights and welfare of human subjects. An inability or delay in obtaining institutional review board approval could prevent or delay the initiation and completion of clinical trials, and the FDA may decide not to consider any data or information derived from a clinical investigation not subject to initial and continuing institutional review board review and approval.

[Table of Contents](#)

In addition, cancer vaccines are a relatively new form of therapeutic treatment and a very limited number of such products have received regulatory approval. Therefore, the FDA or other regulatory authority may apply standards for approval of a new cancer vaccine that is different from past experience.

Numerous factors could affect the timing, cost or outcome of our drug development efforts, including the following:

- difficulties or delays in enrolling patients in our planned clinical trials in conformity with required protocols or projected timelines;
- Challenges in locating and enrolling a sufficient number of patients of our clinical trials due to competitors' numerous ongoing trials for the same or similar indications;
- conditions imposed on us by the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;
- difficulties or delays in arranging for third parties to conduct clinical trials of our product candidates;
- problems in engaging institutional review boards to oversee trials or problems in obtaining or maintaining institutional review board approval of studies;
- third-party contractors failing to comply with regulatory requirements or meet their contractual obligations to us in a timely manner;
- our drug candidates having very different chemical and pharmacological properties in humans than in laboratory testing and interacting with human biological systems in unforeseen, ineffective or harmful ways, and the possibility that our previous Phase 1 or Phase 2 trials will not be indicative of our drug candidates' performance in larger patient populations;
- the need to suspend or terminate our clinical trials if the participants are being exposed to unacceptable health risks;
- insufficient or inadequate supply or quality of our drug candidates or other necessary materials necessary to conduct our clinical trials;
- disruption at our clinical trial sites resulting from local social or political unrest or other geopolitical factors;
- effects of our drug candidates not having the desired effects or including undesirable side effects or the drug candidates having other unexpected characteristics;
- negative or inconclusive results from our clinical trials or the clinical trials of others for drug candidates similar to our own or inability to generate statistically significant data confirming the efficacy of the product being tested;
- adverse results obtained by other companies developing similar drugs;
- modification of the drug during testing;
- our capital resources; and
- reallocation of our financial and other resources to other clinical programs.

It is possible that none of the product candidates that we develop will obtain the appropriate regulatory approvals necessary for us to begin selling them or that any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. The time required to obtain FDA and other approvals is unpredictable but often can take years following the commencement of clinical trials, depending upon the complexity of the drug candidate. Any analysis we perform of data from clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenue from the particular drug candidate.

In addition, the length of time to develop the product candidates as well as any regulatory delays in the development and regulatory approval process could cause the patent exclusivity to be unavailable or greatly reduced for each product candidate. The lack of patent exclusivity could have a material adverse effect on our ability to generate revenue from the particular drug candidate.

[Table of Contents](#)

We are also subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process includes all of the risks associated with the FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Approval by the FDA does not assure approval by regulatory authorities outside of the United States.

We may use our financial and human resources to pursue a particular research program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and human resources, we may forego or delay pursuit of opportunities with some programs or potential product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or more profitable market opportunities. Our spending on current and future research and development programs and future product candidates for specific indications may not yield any commercially viable products. We may also enter into additional strategic collaboration agreements to develop and commercialize some of our programs and potential product candidates in indications with potentially large commercial markets. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, it may relinquish valuable rights to that product candidate through strategic collaborations, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate, or we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome.

Clinical testing is expensive and can take many years to complete, and our outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical and clinical trials.

We may experience delays in our ongoing or future clinical trials and we do not know whether planned clinical trials will begin or enroll subjects on time, will need to be redesigned or will be completed on schedule, if at all. There can be no assurance that the FDA will not put clinical trials of any of our product candidates on clinical hold in the future. Clinical trials may be delayed, suspended or prematurely terminated for a variety of reasons, such as:

- delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a clinical trial design that we are able to execute;
- delay or failure in obtaining authorization to commence a trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a trial;
- delay or failure in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- delay or failure in obtaining institutional review board, approval or the approval of other reviewing entities, including comparable foreign regulatory authorities, to conduct a clinical trial at each site;
- withdrawal of clinical trial sites from our clinical trials or the ineligibility of a site to participate in our clinical trials;
- delay or failure in recruiting and enrolling suitable subjects to participate in a trial;
- delay or failure in subjects completing a trial or returning for post-treatment follow-up;
- clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial;
- inability to identify and maintain a sufficient number of trial sites, many of which may already be engaged in other clinical trial programs, including some that may be for the same indication;

[Table of Contents](#)

- failure of our third-party clinical trial managers, CROs, clinical trial sites, contracted laboratories or other third-party vendors to satisfy their contractual duties, meet expected deadlines or return trustworthy data;
- delay or failure in adding new trial sites;
- interim results or data that are ambiguous or negative or are inconsistent with earlier results or data;
- alteration of trial design necessitated by re-evaluation of design assumptions based upon observed data;
- feedback from the FDA, the IRB, DSMBs or a comparable foreign regulatory authority, or results from earlier stage or concurrent preclinical studies and clinical trials, that might require modification to the protocol for a trial;
- a decision by the FDA, the IRB, a comparable foreign regulatory authority, or us, or a recommendation by a DSMB or comparable foreign regulatory authority, to suspend or terminate clinical trials at any time for safety issues or for any other reason;
- unacceptable risk-benefit profile, unforeseen safety issues or adverse side effects;
- failure to demonstrate a benefit from using a product candidate;
- difficulties in manufacturing or obtaining from third parties sufficient quantities of a product candidate to start or to use in clinical trials;
- lack of adequate funding to continue a trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional studies or increased expenses associated with the services of our CROs and other third parties; or
- changes in governmental regulations or administrative actions or lack of adequate funding to continue a clinical trial.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the severity of the disease under investigation, the proximity of subjects to clinical sites, the patient referral practices of physicians, the eligibility criteria for the trial, the design of the clinical trial, ability to obtain and maintain patient consents, risk that enrolled subjects will drop out or die before completion, competition for patients from other clinical trials, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages and risks of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. We may not be able to initiate or continue to support clinical trials of our product candidates for one or more indications, or any future product candidates if we are unable to locate and enroll a sufficient number of eligible participants in these trials as required by the FDA or other regulatory authorities. Even if we are able to enroll a sufficient number of patients in our clinical trials, if the pace of enrollment is slower than we expect, the development costs for our product candidates may increase and the completion of our trials may be delayed or our trials could become too expensive to complete. We rely on CROs, other vendors and clinical trial sites to ensure the proper and timely conduct of our clinical trials, and while we have agreements governing their committed activities, we have limited influence over their actual performance.

If we experience delays in the completion or termination of any clinical trial of our product candidates, the approval and commercial prospects of such product candidate will be harmed, and our ability to generate product revenues from such product candidate will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Any delays in completing our clinical trials for our product candidates may also decrease the period of commercial exclusivity. In addition, many of the factors that could cause a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

Our current and future product candidates, the methods used to deliver them or their dosage levels may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label or result in significant negative consequences following any regulatory approval.

Undesirable side effects caused by our current or future product candidates, their delivery methods or dosage levels could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authority. For example, although no high-grade delayed type hypersensitivity in the skin or systemic anaphylaxis events have been noted after GPS administration in patients treated in our clinical studies to date, it is theoretically possible that such toxicities, or other type of adverse events, may occur in future clinical studies. As a result of safety or toxicity issues that we may experience in our clinical trials, we may not receive approval to market any product candidates, which could prevent us from ever generating revenues or achieving profitability. Results of our trials could reveal an unacceptably high severity and incidence of side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may have a material adverse effect on our business, results of operations, financial condition, cash flows and future prospects.

Additionally, if any of our product candidates receives regulatory approval, and we or others later identify undesirable side effects caused by such product, a number of potentially significant negative consequences could result, including that:

- we may be forced to suspend marketing of such product;
- regulatory authorities may withdraw their approvals of such product;
- regulatory authorities may require additional warnings on the label that could diminish the usage or otherwise limit the commercial success of such products;
- we may be required to conduct post-marketing studies;
- we may be required to change the way the product is administered;
- we could be sued and held liable for harm caused to subjects or patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved.

Our product development program may not uncover all possible adverse events that patients who take our product candidates may experience. The number of subjects exposed to product candidates and the average exposure time in the clinical development program may be inadequate to detect rare adverse events, or chance findings, that may only be detected once the product is administered to more patients and for greater periods of time.

Clinical trials by their nature utilize a sample of the potential patient population. However, with a limited number of subjects and limited duration of exposure, we cannot be fully assured that rare and severe side effects of our product candidates will be uncovered. Such rare and severe side effects may only be uncovered with a significantly larger number of patients exposed to our product candidates. If such safety problems occur or are identified after our product candidates reaches the market, the FDA may require that we amend the labeling of the product or recall the product, or may even withdraw approval for the product.

We currently have orphan drug exclusivity for certain product candidates, and may seek Orphan Drug Product designation for additional product candidates or indications, which might not be received or provide the intended benefit thereof.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States. We received Orphan Drug Product designations, from the FDA as well as orphan medicinal product designations, from the EMA, for GPS in AML and MPM. We also have received Orphan Drug Product designation for GALE-301 and for GALE-302 from the FDA.

Generally, if a product with an orphan drug designation subsequently receives the first regulatory approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug for that time period. The applicable period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug product designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve a new drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

We currently have Fast Track designation for certain product candidates, and may seek Fast Track designation for additional product candidates or indications, which might not be received or provide the intended benefits thereof.

If a product candidate is intended for the treatment of a serious condition and nonclinical or clinical data demonstrate the potential to address unmet medical need for this condition, a product sponsor may apply to the FDA for Fast Track designation, which may or may not be granted by the FDA. The FDA has given us Fast Track designation for GPS in AML and MPM and for NeuVax.

However, Fast Track designation does not ensure that we will receive marketing approval or that approval will be granted within any particular timeframe. We may not experience a faster development or regulatory review or approval process with Fast Track designation compared to conventional FDA procedures. In addition, the FDA may withdraw Fast Track designation if it believes that the designation is no longer supported by data from our clinical development program. Fast Track designation alone does not guarantee qualification for the FDA's priority review procedures.

Failure to obtain regulatory approval in international jurisdictions would prevent our product candidates from being marketed abroad.

In addition to regulations in the United States, to market and sell our product candidates in the European Union, many Asian countries and other jurisdictions, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. Clinical trials accepted in one country may not be accepted by regulatory authorities in other countries. In addition, many countries outside the United States require that a product be approved for reimbursement before it can be approved for sale in that country. A product candidate that has been approved for sale in a particular country may not receive reimbursement approval in that country. We may not be able to obtain approvals from regulatory authorities

outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any market. If we are unable to obtain approval of any of our current or future product candidates by regulatory authorities in the European Union, Asia or elsewhere, the commercial prospects of that product candidate may be significantly diminished, our business prospects could decline and this could materially adversely affect our business, results of operations and financial condition.

Even if our current and future product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if we obtain regulatory approval for a product candidate, it would be subject to ongoing requirements by the FDA and comparable foreign regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, adverse event reporting, safety surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-marketing information. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance by us and/or our contract manufacturing organizations, or CMOs, and CROs for any post-approval clinical trials that it conducts. The safety profile of any product will continue to be closely monitored by the FDA and comparable foreign regulatory authorities after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of our product candidates, they may require labeling changes or establishment of a risk evaluation and mitigation strategy, impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance.

In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP, cGCP, and other regulations. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- require us to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications filed by us;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products, refuse to permit the import or export of products, or require us to initiate a product recall.

The occurrence of any event or penalty described above may inhibit our ability to successfully commercialize our products and generate revenues.

[Table of Contents](#)

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the DOJ, the Office of Inspector General of HHS, state attorneys general, members of Congress and the public. Additionally, advertising and promotion of any product candidate that obtains approval outside of the United States will be heavily scrutinized by comparable foreign regulatory authorities. Violations, including actual or alleged promotion of our products for unapproved or off-label uses, are subject to enforcement letters, inquiries and investigations, and civil and criminal sanctions by the FDA. Any actual or alleged failure to comply with labeling and promotion requirements may have a negative impact on our business.

We may not successfully identify, acquire, develop or commercialize new potential product candidates.

Part of our business strategy is to explore and evaluate opportunities to expand our product candidate pipeline by identifying and validating new product candidates, which we may develop, in-license or acquire. In addition, in the event that our existing product candidates do not receive regulatory approval or are not successfully commercialized, then the success of our business will depend on our ability to expand our product pipeline through in-licensing or acquisitions. We may be unable to identify relevant product candidates. If we do identify such product candidates, we may be unable to reach acceptable terms with any third party from which we desire to in-license or acquire them.

We may not realize the benefits our of strategic alliances that we may form in the future.

We may form strategic alliances, create joint ventures or collaborations or enter into licensing arrangements with third parties that we believe will complement or augment our existing business. These relationships, or those like them, may require us to incur nonrecurring and other charges, increase our near- and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic alliances and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic alliance or other alternative arrangements for any future product candidates and programs because our research and development pipeline may be insufficient, our product candidates and programs may be deemed to be at too early a stage of development for collaborative effort and third parties may not view our product candidates and programs as having the requisite potential to demonstrate safety and efficacy. If we license products or acquire businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the revenues or specific net income that justifies such transaction. Any delays in entering into new strategic alliances agreements related to our product candidates could also delay the development and commercialization of our product candidates and reduce their competitiveness even if they reach the market.

GALE-401 must successfully complete a Phase 3 clinical trial and obtain regulatory approval before we can market the product and our competitors may obtain a successful clinical trial result and regulatory approval before we do.

GALE-401 contains the active ingredient, anagrelide, an FDA-approved product for the treatment of patients with MPNs, to lower abnormally elevated platelet levels. The currently available IR, version of anagrelide causes adverse reactions that are believed to be dose and plasma concentration dependent. According to the Highlights section of the FDA-approved prescribing information for AGRYLIN (anagrelide hydrochloride) capsules, for oral use (as revised in July 2015), the most common adverse reactions (incidence > 5%) are headache, palpitations, diarrhea, asthenia, edema, nausea, abdominal pain, dizziness, pain, dyspnea, cough, flatulence, vomiting, fever, peripheral edema, rash, chest pain, anorexia, tachycardia, malaise, paresthesia, back pain, pruritus and dyspepsia. These adverse reactions may limit the use of the IR version of the drug. Therefore, reducing the maximum concentration, is hypothesized to reduce the adverse reactions, while preserving efficacy, potentially allowing broader use of the drug. We have analyzed data from multiple Phase 1 and 2 GALE-401 clinical trials and the treatment landscape for MPNs, with a current focus on ET, where we see an unmet medical need in patients who are intolerant to the current standard of care. The risks include but are not limited to regulatory (agreement with regulatory agency on the development plan), operational (rate of enrollment), and statistical confirmation of the safety and efficacy endpoints. In addition, pursuant to the terms of the amended Exclusive License Agreement with BioVascular, dated December 20, 2013, if the first patient is not enrolled in the Phase 3 clinical trial by December 31, 2018, BioVascular shall have the right to terminate the license agreement. Even if we successfully complete a Phase 3 trial, there are other potential competitors whose clinical trials may be successful and obtain regulatory approval prior to our regulatory approval.

We are dependent on technologies we license, and if we lose the right to license such technologies or we fail to license new technologies in the future, our ability to develop new products would be harmed.

We currently are dependent on licenses from third parties for technologies relating to our product candidates. Our current licenses impose, and any future licenses we enter into are likely to impose, various development, funding, royalty, diligence, sublicensing, insurance and other obligations on us. If our license with respect to any of these technologies is terminated for any reason, the development of the products contemplated by the licenses would be delayed, or suspended altogether, while we seek to license similar technology or develop new non-infringing technology. The costs of obtaining new licenses are high.

Risks associated with operating in foreign countries could materially adversely affect our product development.

We may conduct future studies in countries outside of the United States. Consequently, we may be subject to risks related to operating in foreign countries. Risks associated with conducting operations in foreign countries include:

- differing regulatory requirements for drug approvals and regulation of approved drugs in foreign countries;
- more stringent privacy requirements for data to be supplied to the our operations in the United States, e.g. General Data Protection Regulation, in the European Union;
- unexpected changes in tariffs, trade barriers and regulatory requirements; economic weakness, including inflation, or political instability in particular foreign economies and markets; compliance with tax, employment, immigration and labor laws for employees living or traveling abroad; foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses or reduced revenues, and other obligations incident to doing business or operating in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism.

Risks Related to Our Manufacturing

We have limited to no manufacturing, sales, marketing or distribution capability and must rely upon third parties for such.

We currently have agreements with various third-party manufacturing facilities for production of our product candidates for research and development and testing purposes. We depend on these manufacturers to meet our deadlines, quality standards and specifications. Our reliance on third parties for the manufacture of our active pharmaceutical ingredient and drug product and, in the future, any approved products, creates a dependency that could severely disrupt our research and development, our clinical testing, and ultimately our sales and marketing efforts if the source of such supply proves to be unreliable or unavailable. If the contracted manufacturing source is unreliable or unavailable, we may not be able to manufacture clinical drug supplies of our product candidates, and our preclinical and clinical testing programs may not be able to move forward and our entire business plan could fail.

Both the active pharmaceutical ingredient and drug product for our product candidates are currently single sourced. We believe these single sources are currently capable of supplying all anticipated needs of our proposed clinical studies, as well as initial commercial introduction. If we are able to commercialize our products in the future, there is no assurance that our manufacturers will be able to meet commercialized scale production requirements in a timely manner or in accordance with applicable standards or cGMP. Once the nature and scope of additional indications and their commensurate drug product demands are established, we will seek secondary suppliers of both the active pharmaceutical ingredient and drug product for our product candidates, but we cannot assure that such secondary suppliers will be found on terms acceptable to us, or at all.

We are subject to a multitude of manufacturing risks, any of which could substantially increase our costs and limit supply of our product candidates.

Our company and our CMOs will need to conduct significant development work for each product candidate for each target indication for studies, trials and commercial launch readiness. For example, the processes by which GPS is manufactured were initially developed by MSK for clinical purposes. Concurrent with the license of GPS, we acquired certain supplies intended for clinical use, from MSK. These MSK clinical supplies may not be adequate for future clinical studies.

We intend to improve the existing processes for GPS for more advanced clinical trials or commercialization. Developing commercially viable manufacturing processes is a difficult and uncertain task, and there are risks associated with scaling to the level required for advanced clinical trials or commercialization, including cost overruns, potential problems with process scale-up, process reproducibility, stability issues, consistency and timely availability of reagents or raw materials. The manufacturing facilities in which our product candidates will be made could be adversely affected by earthquakes and other natural disasters, equipment failures, labor shortages, power failures, and numerous other factors.

Additionally, the process of manufacturing our product candidates is complex, highly regulated and subject to several risks, including but not limited to:

- the manufacturing process is extremely susceptible to product loss due to contamination, equipment failure or improper installation or operation of equipment, or vendor or operator error. Even minor deviations from normal manufacturing and distribution processes for our product candidates could result in reduced production yields, product defects, and other supply disruptions. Product defects can also occur unexpectedly. If microbial, viral, or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates is made, such manufacturing facilities may need to be closed for an extended period of time to allow us to investigate and remedy the contamination; and
- GPS's active pharmaceutical ingredient manufacturing is sensitive to heavy metal contamination. As such, extremely low levels of heavy metals are part of the active pharmaceutical ingredient manufacturing process; GPS's drug product manufacturing is sensitive to water and oxygen contamination, as such the drug product is lyophilized (to reduce residual water) and under a nitrogen blanket (to reduce any oxygen). The presence of heavy metals in the active pharmaceutical ingredient and excess water and oxygen in the drug product can lead to higher than acceptable levels of impurities, which can lead to the active pharmaceutical ingredient or drug product being unacceptable for use.

Any adverse developments affecting manufacturing operations for our product candidates may result in shipment delays, inventory shortages, lot failures, withdrawals or recalls or other interruptions in the supply of our drug substance and drug product, which could delay the development of our product candidates. We may also have to write off inventory, incur other charges and expenses for supply of drug product that fails to meet specifications, undertake costly remediation efforts, or seek more costly manufacturing alternatives. Inability to meet the demand for our product candidates could damage our reputation and the reputation of our products among physicians, healthcare payors, patients or the medical community, and cancer treatment centers, which could adversely affect our ability to operate our business and our results of operations.

In the clinical trials using NeuVax and GPS, GM-CSF is also administered and our availability is dependent upon a third-party manufacturer, which may or may not reliably provide GM-CSF, thus jeopardizing the completion of the trials.

Some of our product candidates are administered in combination with GM-CSF, available in both liquid and lyophilized forms exclusively from one manufacturer. We will continue to be dependent on that manufacturer for our supply of GM-CSF in connection with the ongoing NeuVax and GPS trials and the potential commercial manufacture of these programs. We have not entered into a supply agreement with the manufacturer for GM-CSF, and instead rely on purchase orders to meet our supply needs. Any temporary interruptions or discontinuation of the availability of GM-CSF, or any determination by us to change the GM-CSF used with NeuVax or GPS, may have a material adverse effect on our clinical trials and any commercialization of the assets.

If any of our CMOs' clinical manufacturing facilities are damaged or destroyed or production at such facilities is otherwise interrupted, our business and prospects would be negatively affected.

If our CMOs' manufacturing facilities or the equipment in them is damaged or destroyed, we may not be able to quickly or inexpensively replace our manufacturing capacity or replace it at all. In the event of a temporary or protracted loss of this facility or equipment, we might not be able to transfer manufacturing to another CMO. Even if we could transfer manufacturing to another CMO, the shift would likely be expensive and time-consuming, particularly because the new facility would need to comply with the necessary regulatory requirements and we would need FDA approval before selling any products manufactured at that facility. Such an event could delay our clinical trials or reduce our product sales.

Currently, we maintain insurance coverage against damage to our property and to cover business interruption and research and development restoration expenses. However, our insurance coverage may not reimburse us, or may not be sufficient to reimburse us, for any expenses or losses we may suffer. We may be unable to meet our requirements for our product candidates if there were a catastrophic event or failure of our current manufacturing facility or processes.

Risks Related to Our Dependence on Third Parties

We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, or if we lose any of our CROs or other key third-party vendors, we may not be able to obtain regulatory approval for or commercialize our current or future product candidates on a timely basis, if at all.

We have relied upon and plan to continue to rely upon third-party CROs, vendors and contractors to monitor and manage data for our ongoing preclinical and clinical programs. For example, our collaborating investigators at MSK, along with their clinical and clinical operations teams, manage the conduct of the ongoing clinical trials for GPS as well as perform the analysis, publication and presentation of data and results related to this program. We also rely on collaborating investigators, along with their clinical and clinical operations teams, at MSK for the collection and transfer of various types of follow-up data regarding studies previously conducted by MSK. We plan to rely on CROs and other third-party vendors for all currently contemplated clinical studies, with services to be rendered by such CROs ranging from, in the case of assorted Phase 2 trials, specific and need-tailored (e.g. , data management and biostatistics) only to, in the case of in the case of our immune combination (PD1 blockade) Phase 2 trial and all planned Phase 3 trials, all-encompassing. We rely on these parties for the execution of our preclinical studies and clinical trials, and we control only some aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs does not relieve us of our regulatory responsibilities. We also rely on third parties to assist in conducting our preclinical studies in accordance with Good Laboratory Practices, and the Animal Welfare Act requirements. Our company and our CROs are required to comply with federal regulations, and GCP, which are international standards meant to protect the rights and health of patients that are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for all of our products in clinical development. Regulatory authorities enforce GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If our company, or any of our partners or CROs, fail to comply with applicable regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our regulatory applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with applicable requirements. In addition, our clinical trials must be conducted with product produced under cGMP and other requirements. We are also required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, clinicaltrials.gov, within a specified timeframe. Failure to comply with these regulations may require us to repeat preclinical studies and clinical trials, which would delay the regulatory approval process and result in adverse publicity.

[Table of Contents](#)

Our CROs, third-party vendors and contractors are not our employees, and except for remedies available to us under our agreements with such CROs, third-party vendors and contractors, we cannot control whether or not they devote sufficient time and resources, including experienced staff, to our ongoing clinical, nonclinical and preclinical programs. They may also have relationships with other entities, some of which may be our competitors. If CROs, third-party vendors and contractors do not successfully carry out their contractual duties or obligations or meet expected deadlines or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our current or future product candidates. CRO, vendor or contractor errors could cause our results of operations and the commercial prospects for our current or future product candidates to be harmed, our costs to increase and our ability to generate revenues to be delayed.

Our internal capacity for clinical trial execution and management is limited and therefore we have relied on third parties. Outsourcing these functions involves risk that third parties may not perform to our standards, may not produce results or data in a timely manner or may fail to perform at all. Other data or data updates from studies or trials previously conducted by MSK or others may emerge in the future. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. We currently have a small number of employees, which limits the internal resources we have available to identify and monitor our third-party providers. To the extent we are unable to identify and successfully manage the performance of third-party service providers in the future, our business may be adversely affected. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

Our CROs, third-party vendors and contractors have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs, third-party vendors and contractors have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. Identifying, qualifying and managing performance of third-party service providers can be difficult, time consuming and cause delays in our development programs. In addition, there is a natural transition period when a new CRO, third-party vendor or contractor commences work and the new CRO, third-party vendor or contractor may not provide the same type or level of services as the original provider. If any of our relationships with our third-party CROs, third-party vendors or contractors terminate, we may not be able to enter into arrangements with alternative CROs, third-party vendors or contractors on a timely basis, on commercially reasonable terms or at all.

We may not be able to establish or maintain the third-party relationships that are necessary to develop or potentially commercialize some or all of our product candidates.

We expect to depend on collaborators, partners, licensees, clinical research organizations and other third parties to support our discovery efforts, to formulate product candidates, to manufacture our product candidates, and to conduct clinical trials for some or all of our product candidates. We cannot guarantee that we will be able to successfully negotiate agreements for or maintain relationships with collaborators, partners, licensees, clinical investigators, vendors and other third parties on favorable terms, if at all. Our ability to successfully negotiate such agreements will depend on, among other things, potential partners' evaluation of the superiority of our technology over competing technologies and the quality of the preclinical and clinical data that we have generated, and the perceived risks specific to developing our product candidates. If we are unable to obtain or maintain these agreements, we may not be able to clinically develop, formulate, manufacture, obtain regulatory approvals for or commercialize our product candidates. Under certain license agreements that we have already entered into, we have minimum dollar amounts per year that we are obligated to spend on the development of the technology we have licensed from our contract partners and other obligations to maintain certain licenses. If we fail to meet this requirement under any of our licenses that contain such requirements or any other obligations under these licenses, we may be in breach of our obligations under such agreement, which may result in the loss of the technology licensed. We cannot necessarily control the amount or timing of resources that our contract partners will devote to our research and development programs, product candidates or potential product candidates, and we cannot guarantee that these parties will fulfill their obligations to us under these arrangements in a timely fashion. We may not be able to readily terminate any such agreements with contract partners even if such contract partners do not fulfill our obligations to us.

[Table of Contents](#)

In addition, we may receive notices from third parties from time to time alleging that our technology or product candidates infringe upon the intellectual property rights of those third parties. Any assertion by third parties that our activities or product candidates infringe upon our intellectual property rights may adversely affect our ability to secure strategic partners or licensees for our technology or product candidates or our ability to secure or maintain manufacturers for our compounds.

If we fail to meet our obligations under our license agreements, we may lose the ability to develop our product candidates.

Our business depends on our ability to license therapeutic compounds from third parties. If we fail to meet our obligations under our license agreements, we may lose the ability to develop our product candidates, which would adversely affect our business.

We enter into various contracts in the normal course of our business in which we indemnify the other party to the contract. In the event we have to perform under these indemnification provisions, it could have a material adverse effect on our business, financial condition and results of operations.

In the normal course of business, we periodically enter into academic, commercial, service, collaboration, licensing, consulting and other agreements that contain indemnification provisions. With respect to our academic and other research agreements, we typically indemnify the institution and related parties from losses arising from claims relating to the products, processes or services made, used, sold or performed pursuant to the agreements for which we have secured licenses, and from claims arising from our or our sublicensees' exercise of rights under the agreement. With respect to our collaboration agreements, we indemnify our collaborators from any third-party product liability claims that could result from the production, use or consumption of the product, as well as for alleged infringements of any patent or other intellectual property right by a third party. With respect to consultants, we indemnify them from claims arising from the good faith performance of their services.

Should our obligation under an indemnification provision exceed applicable insurance coverage or if we were denied insurance coverage, our business, financial condition and results of operations could be adversely affected. Similarly, if we are relying on a collaborator to indemnify us and the collaborator is denied insurance coverage or the indemnification obligation exceeds the applicable insurance coverage, and if the collaborator does not have other assets available to indemnify us, our business, financial condition and results of operations could be adversely affected.

Risks Related to Our Intellectual Property

We may not be able to obtain and enforce patent rights or other intellectual property rights that cover our product candidates and that are of sufficient breadth to prevent third parties from competing against us.

Our success with respect to our product candidates will depend in part on our ability to obtain and maintain patent protection in the United States and abroad, to preserve our trade secrets, and to prevent third parties from infringing upon our proprietary rights. Our patents and patent applications, however, may not be sufficient to provide protection for GPS, NeuVax or our other products and product candidates against commercial competition.

The four peptide components of GPS are WT1-A1, WT1-427 long, WT1-331 long, and WT1-122A1 long. We have an exclusive license to United States and foreign patents relating to these peptides from MSK, for all therapeutic and diagnostic uses. Under the license, we have issued patents covering the composition of matter of the WT1-A1 peptide in the United States, Australia, Switzerland, Germany, Spain, France, Great Britain, and Italy, and an issued Canadian patent covering the composition of matter and its use for inducing a cytotoxic T cell response in a human that cross-reacts with a cancer cell that presents a native form of the peptide. The U.S. patent on the WT1-A1 peptide (U.S. Patent No. 7,488,718) will expire on March 22, 2026, including patent term adjustment, and the foreign patents will expire on November 30, 2024, absent patent term extension.

[Table of Contents](#)

We have licensed, issued patents covering the composition of matter of the WT1-427 long peptide, and methods of use, in the United States, Australia, Switzerland, Germany, Spain, France, Great Britain, Ireland, Italy, and Canada. The United States composition of matter patent on the WT1-427 long peptide (U.S. Patent No. 8,765,687) will expire on October 26, 2031, including patent term adjustment. The United States method of use patent (U.S. Patent No. 9,233,149) will expire on October 17, 2026, absent patent term extension, and covers treating a subject with a WT1-expressing cancer, reducing an incidence of a WT1-expressing cancer, or its relapse, and inducing the formation and proliferation of a cytotoxic T lymphocyte specific for a WT1-expressing cancer. The foreign patents will expire on October 17, 2026, absent patent term extension.

We have licensed, issued patents covering the composition of matter of the WT1-331 long peptide, and methods of use, in the United States, Switzerland, Germany, Spain, France, Great Britain, Ireland, and Italy. The United States composition of matter patent on the WT1-331 long peptide (U.S. Patent No. 8,765,687) will expire on October 26, 2031, including patent term adjustment. The United States method of use patent (U.S. Patent No. 9,233,149) will expire on October 17, 2026, absent patent term extension, and covers treating a subject with a WT1-expressing cancer, reducing an incidence of a WT1-expressing cancer, or its relapse, and inducing the formation and proliferation of a cytotoxic T lymphocyte specific for a WT1-expressing cancer. The foreign patents will expire on October 17, 2026, absent patent term extension.

We have a licensed, issued United States patent covering the composition of matter of the WT1-1221A1 long peptide, and issued patents covering the composition of matter and methods of use, in Austria, Belgium, Switzerland, Germany, Spain, Finland, France, Great Britain, Greece, Ireland, Italy, Netherlands, Poland, Romania, and Turkey. The United States composition of matter patent on the WT1-1221A1 long peptide (U.S. Patent No. 9,265,816) will expire on February 20, 2033, including patent term adjustment. The European patents will expire on April 10, 2027, absent patent term extension, and cover the composition of matter and use of the peptide for the preparation of a medicament for treating a WT1-expressing cancer or for reducing an incidence of a WT1-expressing cancer or its relapse in a subject.

The active peptide found in NeuVax, the E75 peptide, has been known and studied for many years. We have one issued U.S. patent, US 6,514,942, covering the composition of matter of the E75 peptide, which expired in mid-2015, prior to any potential commercialization of NeuVax. We do not have and will not be able to obtain any composition of matter patent protection for E75, the active peptide in NeuVax. We also have a license from HJF to issued United States, European, Japanese, Korean, Mexican and Australian method of use patents, which expire in 2028, that are directed to a method of inducing immunity against breast cancer recurrence by administering a composition comprising the E75 peptide to patients who have both an immunohistochemistry, or IHC, rating of 1+ or 2+ for HER2/neu protein expression, as well as a fluorescence in situ hybridization, or FISH, rating of less than about 2.0 for HER2/neu gene expression. The license further includes an issued United States method of use patent directed to a method of inducing immunity against recurrence of any HER2/neu expressing tumors by administering the E75 peptide to patients with tumors having a FISH rating of less than about 2.0 for HER2/neu gene expression; an issued United States patent which includes claims to the use of E75 to reduce the risk of cancer recurrence, including bone only recurrence; and pending applications with similar claims in a number of foreign jurisdiction, all of which expire in 2028. Also included in the license is a method of use patent, which expires in 2026, that is directed to the use of NeuVax in combination with Herceptin (trastuzumab) to treat any HER2/neu expressing cancer. Thus, our method of use patents may not prevent competitors from seeking to develop and market NeuVax for use in cancer patients who do not meet these criteria. If any such alternative uses were approved, this could lead to off-label use and price erosion for our NeuVax product. We may seek FDA approval for use of NeuVax to treat cancer patients who fall outside the claimed IHC and FISH ranges and for other cancers as well. Although we are pursuing additional patent protection for NeuVax through pending patent applications, we may not be able to obtain additional patent protection that would provide us with a significant commercial advantage.

Anagrelide hydrochloride, the sole active pharmaceutical ingredient in GALE-401, has been approved for many years and, thus, it is not possible to obtain composition of matter patents that cover anagrelide hydrochloride. As a result, competitors who obtain the requisite regulatory approval can offer products with the same active pharmaceutical ingredients as GALE-401, so long as the competitors do not infringe any formulation patents that we may have or may obtain or license, if any. The only patent protection that we have or are likely to obtain covering GALE-401 are patents relating to specific formulations, methods using these formulations, and methods of manufacturing and packaging. We have an issued United States patent, which expires in 2020, covering methods of

[Table of Contents](#)

Using anagrelide to reduce platelet count in patients subject to veno-occlusive events. We have granted patents in the United States, United Kingdom and Japan, which expire in 2029, covering controlled release formulations of anagrelide and methods of use. We also are prosecuting pending patent applications in other territories including, but not limited to, the United States, Europe, India, and Japan, which may not issue prior to any potential commercialization of GALE-401. We may seek FDA approval for use of GALE-401 to treat patients with myeloproliferative neoplasms that include several hematological disorders, including essential thrombocythemia. Although we are pursuing additional patent protection for GALE-401 through pending patent applications, we may not be able to obtain additional patent protection that would provide us with a significant commercial advantage.

The active peptides found in GALE-301 and GALE-302 are derived from Folate Binding Protein. One of the active peptides, E39, has been known and studied for many years. The other active peptide, GALE-302 (peptide E39²), is a derivative of E39. We have a license from MDACC and HJF to issued and granted patents in the United States, Europe, Canada, and Japan, covering composition of matter for the E39 derivative peptides, including GALE-302, alone and in combination with E39, as well as the use of these compositions for the treatment of cancer. These patents are expected to expire in 2022, prior to any potential commercialization of GALE-301. We also have an allowed United States application with claims to combination dosage regimens of GALE-301 and GAL-302 which will expire in 2036 (excluding PTA). We also have pending United States and International (PCT) applications with claims to methods of inducing an immune response to tumors with an immunohistochemistry (IHC) rating of 0 or 1+ for folate binding protein expression which, if granted, would expire in 2037. We do not have and will not be able to obtain any composition of matter patent protection for the E39 peptide in any territory. The license we have from MDACC and HJF grants us the right to develop and market GALE-301 for any use, including methods of treating cancer. Our patents may not prevent competitors from seeking to develop and market the E39 peptide alone. If any such alternative uses of compositions containing the E39 peptide were approved, this could lead to off label use and price erosion for GALE-301. We may seek FDA approval for use of GALE-301, alone or in combination with GALE-302, to treat cancer patients with ovarian and endometrial cancers and for other cancers, as well. Although we are pursuing additional patent protection for GALE-301 and the combination of GALE-301 and GALE-302 through pending patent applications, we may not be able to obtain additional patent protection that would provide us with a significant commercial advantage.

Our ability to obtain, maintain and enforce patents is uncertain and involves complex legal and factual questions. Accordingly, rights under any patents we have or may obtain or license may not provide us with sufficient protection for our commercial product and product candidates to afford a commercial advantage against competitive products or processes, including those from branded and generic pharmaceutical companies. In addition, we cannot guarantee that any patents will issue from any pending or future patent applications owned by or licensed to us. Nor can we guarantee that the claims of these patents will be held valid or enforceable by the courts or will provide us with any significant protection against competitive products or otherwise be commercially valuable to us.

Changes in either the patent laws or in the interpretations of patent laws in the United States or abroad may diminish the value of our intellectual property. In addition, on September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to the U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act, in particular the first-to-file provision and our implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement of or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents.

In addition, United States Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances in certain situations. From time to time, the United States Supreme Court, other federal courts, the United States Congress, or interpretation by the United States Patent and Trademark Office or USPTO, may change the standards of patentability and any such changes could have a negative impact on our business.

[Table of Contents](#)

Some cases decided by the United States Supreme Court have involved questions of when claims reciting abstract ideas, laws of nature, natural phenomena and/or natural products are eligible for a patent, regardless of whether the claimed subject matter is otherwise novel and inventive. These cases include *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013), also known as the Myriad decision; *Alice Corp. v. CLS Bank International*, 573 U.S. 13-298 (2014), also known as the Alice decision; and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, also known as the Prometheus decision, 566 U.S. 66 (2012). The full impact of these decisions is not yet known. In view of these and subsequent court decisions, the USPTO has issued materials to patent examiners providing guidance for determining the patent eligibility of claims reciting laws of nature, natural phenomena, or natural products.

Our current product candidates include products, or components, derived to various extents from nature; therefore, these decisions and their interpretation by the courts and the USPTO may impact prosecution, defense, and enforcement of certain types of patent claims in our patent portfolio. In addition to increasing uncertainty with regard to our ability to obtain future patents, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on these and other decisions by United States Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change or be interpreted in unpredictable ways that would weaken our ability to obtain some patent claims or to enforce patents that may issue to us in the future. In addition, these events may adversely affect our ability to defend patents that may issue in procedures in the USPTO or in United States courts.

While we intend to take actions reasonably necessary to enforce our patent rights, we may not be able to detect infringement of our own or in-licensed patents, which may be especially difficult for methods of manufacturing or formulation products, and we depend, in part, on our licensors and collaborators to protect a substantial portion of our proprietary rights. In addition, third parties may challenge our in-licensed patents and any of our own patents that we may obtain, which could result in the invalidation or unenforceability of some or all of the relevant patent claims. Litigation or other proceedings to enforce or defend intellectual property rights is very complex, expensive, and may divert our management's attention from our core business and may result in unfavorable results that could adversely affect our ability to prevent third parties from competing with us.

If another party has reason to assert a substantial new question of patentability against any of our claims in our own and in-licensed patents, the third party can request that the patent claims be reexamined, which may result in a loss of scope of some claims or a loss of the entire patent. In addition to potential infringement suits, and interference and reexamination proceedings, we may become a party to patent opposition proceedings where either the patentability of the inventions subject of our patents are challenged, or we are challenging the patents of others. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful. As the medical device, biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that others may assert our commercial product and/or product candidates infringe their patent rights. If a third-party's patents were found to cover our commercial product and product candidates, proprietary technologies or our uses, we or our collaborators could be enjoined by a court and required to pay damages and could be unable to continue to commercialize our products or use our proprietary technologies unless we or it obtained a license to the patent. A license may not be available to us or our collaborators on acceptable terms, if at all. In addition, during litigation, the patent holder could obtain a preliminary injunction or other equitable relief, which could prohibit us from making, using or selling our commercial product and product candidates pending a trial on the merits, which could be years away.

Proprietary trade secrets and unpatented know-how are also very important to our business. Although we have taken steps to protect our trade secrets and unpatented know-how, by entering into confidentiality agreements with third parties, and proprietary information and invention agreements with certain employees, consultants and advisors, third parties may still obtain this information or we may be unable to protect our rights. We also have limited control over the protection of trade secrets used by our licensors, collaborators and suppliers. There can be no assurance that binding agreements will not be breached, that we would have adequate remedies for any breach, or that our trade secrets and unpatented know-how will not otherwise become known or be independently discovered by our competitors. If trade secrets are independently discovered, we would not be able to prevent their use. Enforcing a claim that a third party illegally obtained and is using our trade secrets or unpatented know-how is expensive and time consuming, and the outcome is unpredictable.

[Table of Contents](#)

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed to us alleged trade secrets of their other clients or former employers. As is common in the biotechnology and pharmaceutical industry, certain of our employees were formerly employed by other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Moreover, we engage the services of consultants to assist us in the development of our commercial product and product candidates, many of whom were previously employed at or may have previously been or are currently providing consulting services to, other biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may be subject to claims that these employees and consultants or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or their former or current customers. Litigation may be necessary to defend against these types of claims. Even if we are successful in defending against any such claims, any such litigation would likely be protracted, expensive, a distraction to our management team, not viewed favorably by investors and other third parties, and may potentially result in an unfavorable outcome.

Our product candidates may face competition sooner than expected after the expiration of our composition of matter patent protection for such products.

Our composition of matter patents for many of our product candidates have expired or will expire prior to any product approval. We intend to seek data exclusivity or market exclusivity for our GPS as well as our NeuVax, GALE-301 and GALE-302 product candidates provided under the Federal Food, Drug and Cosmetic Act, or FDCA, and similar laws in other countries. We believe that these product candidates will qualify for 12 years of data exclusivity under the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which was enacted as part of the Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010 enacted in March 2010. Under the BPCIA, an application for a biosimilar product or BLA cannot be submitted to the FDA until four years, or if approved by the FDA, until 12 years, after the original brand product identified as the reference product is approved under a BLA. The BPCIA provides an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The new abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as “interchangeable” based on our similarity to an existing brand product. The new law is complex and is only beginning to be interpreted and implemented by the FDA. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological product candidates. There is also a risk that the U.S. Congress could amend the BPCIA to shorten this exclusivity period, potentially creating the opportunity for biosimilar competition sooner than anticipated after the expiration of our patent protection. Moreover, the extent to which a biosimilar, once approved, will be substituted for any reference product in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If our product candidates are not considered biologics that would qualify for exclusivity under the BPCIA, they may be eligible for market exclusivity as drugs under the FDCA. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA, submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by FDA to be essential to the approval of the application, for example, for new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent.

Even if, as we expect, GPS, NeuVax, GALE-301 and GALE-302 are considered to be reference products eligible for 12 years of exclusivity under the BPCIA or five years of exclusivity under the FDCA, another company could market competing products if the FDA approves a full BLA or full NDA for such product containing the sponsor’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of the products.

[Table of Contents](#)

In some countries outside of the United States, peptide vaccines, such as GPS, NeuVax, GALE-301 and GALE-302, are regulated as chemical drugs rather than as biologics and may or may not be eligible for non-patent exclusivity.

Although we have received orphan drug designation for both GPS, GALE-301 and GALE-302, there is no guarantee that these products will be successfully approved by the FDA, that they will be commercially successful in the marketplace, or that another product will not be approved for the same indication ahead of our product candidate.

If we are sued for infringing the intellectual property rights of third parties, such litigation could be costly and time-consuming and could prevent or delay our development and commercialization efforts.

Our commercial success depends, in part, on us and our collaborators not infringing the patents and proprietary rights of third parties. There is a substantial amount of litigation and other adversarial proceedings, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interference or derivation proceedings, oppositions, and *inter partes* and post-grant review proceedings before the USPTO and non-U.S. patent offices. Numerous U.S. and non-U.S. issued patents and pending patent applications owned by third parties exist in the fields in which we are developing and may develop our current and future product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as our product pipeline grows, the risk increases that our product candidates may be subject to claims of infringement of third parties' patent rights as it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform or predictable.

Third parties may assert infringement claims against us based on existing or future intellectual property rights, alleging that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacturing of our product candidates that we failed to identify. For example, applications filed before November 29, 2000, and certain applications filed on or after that date that will not be filed outside the United States, remain confidential until issued as patents. Except for the preceding exceptions, patent applications in the United States and elsewhere are generally published only after a waiting period of approximately 18 months after the earliest filing date. Therefore, patent applications covering our product candidates, or their use or manufacture, could have been filed by others without our knowledge. In addition, pending patent applications that have been published, including some of which we are aware, could be later amended in a manner that could cover our product candidates or their use or manufacture. We may analyze patents or patent applications of our competitors that we believe are relevant to our activities and believe that we are free to operate in relation to any of our product candidates, but our competitors may obtain issued claims, including in patents we consider to be unrelated, which may block our efforts or potentially result in any of our product candidates or our activities infringing such claims. If we are sued for patent infringement, we would need to demonstrate that our product candidates, products and methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving that a patent is invalid is difficult. For example, in the United States, proving invalidity in a district court proceeding requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents, and proving invalidity in an *inter partes* review proceeding in the USPTO requires a showing of a preponderance of the evidence. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted, which could have a material adverse effect on us. If any issued third-party patents were held by a court of competent jurisdiction to cover aspects of our materials, formulations, methods of manufacture or methods for treatment, we could be forced, including by court order, to cease developing, manufacturing or commercializing the relevant product candidate until such patent expired. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and to continue developing, manufacturing or marketing the infringing product candidate. However, we may not be able to obtain any required license on commercially reasonable terms, or at all. Even if we were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property licensed to us. Ultimately, we could be prevented from commercializing a product candidate, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms. This could harm our business significantly.

[Table of Contents](#)

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defending against claims of patent infringement or misappropriation of trade secrets could be costly and time consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent, or to redesign our infringing product candidates, which may be impossible or require substantial time and monetary expenditure. We may also elect to enter into license agreements in order to settle patent infringement claims prior to litigation, and any such license agreement may require us to pay royalties and other fees that could be significant.

We may face claims that we misappropriated the confidential information or trade secrets of a third party. If we are found to have misappropriated a third party's trade secrets, we may be prevented from further using such trade secrets, which could limit our ability to develop our product candidates. We are not aware of any material threatened or pending claims related to these matters, but in the future litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management. During the course of any patent or other intellectual property litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our product candidates, programs or intellectual property could be diminished. Accordingly, the market price of our shares of common stock may decline.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

We employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we have written agreements and makes every effort to ensure that our employees, consultants, and independent contractors do not use the proprietary information or intellectual property rights of others in their work for us, we may in the future be subject to any claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, enforcing and defending patents on our current and future product candidates in all countries throughout the world would be prohibitively expensive. We or our licensors' intellectual property rights in certain countries outside the United States may be less extensive than those in the United States. In addition, the laws of certain foreign countries do not protect intellectual property rights to the same extent as laws in the United States. Consequently, we and our licensors may not be able to prevent third parties from practicing our and our licensors' inventions in countries outside the United States, or from selling or importing infringing products made using our and our licensors' inventions in and into the United States or other jurisdictions. Competitors may use our and our licensors' technologies in jurisdictions where we have not obtained patent protection or where we do not have exclusive rights under the relevant patent(s) to develop their own products and, further, may export otherwise infringing products to territories where we and our licensors have patent protection but where enforcement is not as strong as that in the United States. These infringing products may compete with our product candidates in jurisdictions where we or our licensors have no issued patents or where we do not have exclusive rights under the relevant patent(s), or our patent claims and other intellectual property rights may not be effective or sufficient to prevent them from so competing. Many companies have encountered significant problems in protecting and defending intellectual property rights

in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us and our licensors to stop the infringement of our and our licensors' patents or marketing of competing products in violation of our and our licensors' proprietary rights generally. Proceedings to enforce our and our licensors' patent rights in foreign jurisdictions could result in substantial costs and divert our attention from other aspects of our business, could put our and our licensors' patents at risk of being invalidated or interpreted narrowly, could put our and our licensors' patent applications at risk of not issuing, and could provoke third parties to assert claims against our or our licensors. We or our licensors may not prevail in any lawsuit that we or our licensors initiate, and even if we or our licensors are successful the damages or other remedies awarded, if any, may not be commercially meaningful.

We have in-licensed a significant portion of our intellectual property from MSK. If we breach our license agreement with MSK, we could lose the ability to continue the development and potential commercialization of GPS.

We do not currently own any patents or patent applications related to our lead product candidate, GPS. GPS is licensed-in from MSK, and includes an exclusive license to United States and foreign patent applications. Under the MSK license agreement, we are subject to various obligations, including diligence obligations with respect to funding, development and commercialization activities, payment obligations upon achievement of certain milestones and royalties on product sales, as well as other material obligations. If there is any conflict, dispute, disagreement or issue of nonperformance between us and MSK regarding our rights or obligations under the license agreements, including any such conflict, dispute or disagreement arising from our failure to satisfy diligence or payment obligations under any such agreement, we may be liable to pay damages and MSK may have a right to terminate the affected license. The loss of our license agreement with MSK could materially adversely affect our ability to proceed to utilize the affected intellectual property in our development efforts, our ability to enter into future collaboration, licensing and/or marketing agreements for GPS and our ability to commercialize GPS. The risks described elsewhere pertaining to our patents and other intellectual property rights also apply to the intellectual property rights that we license, and any failure by us or our licensors to obtain, maintain and enforce these rights could have a material adverse effect on our business.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time-consuming and unsuccessful and have a material adverse effect on the success of our business and on our stock price.

Third parties may infringe our patents, the patents of our licensors, or misappropriate or otherwise violate our or our licensors' intellectual property rights. We and our licensors' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology. In the future, we or our licensors may elect to initiate legal proceedings to enforce or defend our or our licensors' intellectual property rights, to protect our or our licensors' trade secrets or to determine the validity or scope of intellectual property rights we own or control. Any claims that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property rights or that our intellectual property rights are invalid. In addition, third parties may initiate legal proceedings against us or our licensors to challenge the validity or scope of intellectual property rights we own or control. The proceedings can be expensive and time-consuming. Many of our or our licensors' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors can. Accordingly, despite our or our licensors' efforts, we or our licensors may not be able to prevent third parties from infringing upon or misappropriating intellectual property rights we own or control, particularly in countries where the laws may not protect our rights as fully as in the United States. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us are invalid or unenforceable, in whole or in part, or may refuse to stop the other party from using the technology at issue on the grounds that our or our licensors' patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our or our licensors' patents at risk of being invalidated, held unenforceable or interpreted narrowly.

[Table of Contents](#)

Interference or derivation proceedings provoked by third parties, brought by us or our licensors or collaborators, or brought by the USPTO or any non-U.S. patent authority may be necessary to determine the priority of inventions or matters of inventorship with respect to our or our licensors' patents or patent applications. We may also become involved in other proceedings, such as reexamination or opposition proceedings, *inter partes* review, post-grant review or other pre-issuance or post-grant proceedings in the USPTO or our foreign counterparts relating to our intellectual property or the intellectual property of others. An unfavorable outcome in any such proceeding could require us or our licensors to cease using the related technology and commercializing the affected product candidate, or to attempt to license rights to it from the prevailing party.

Our business could be harmed if the prevailing party does not offer us or our licensors a license on commercially reasonable terms if any license is offered at all. Even if we or our licensors obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors. In addition, if the breadth or strength of protection provided by us or our licensor's patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current and future product candidates. Even if we successfully defend such litigation or proceeding, we may incur substantial costs and it may distract our management and other employees. We could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of shares of our common stock.

If we are unable to protect the confidentiality of our trade secrets and other proprietary information, the value of our technology could be materially adversely affected and our business could be harmed.

In addition to seeking the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce, and other elements of our technology, discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, including by enabling them to develop and commercialize products substantially similar to or competitive with our current or future product candidates, thus eroding our competitive position in the market. Trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements and invention assignment agreements with our employees, consultants, and outside scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, or outside scientific advisors might intentionally or inadvertently disclose our trade secrets or confidential, proprietary information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, the laws of certain foreign countries do not protect proprietary rights such as trade secrets to the same extent or in the same manner as the laws of the United States. Misappropriation or unauthorized disclosure of our trade secrets to third parties could impair our competitive advantage in the market and could materially adversely affect our business, results of operations and financial condition.

Significant disruptions of information technology systems or breaches of information security could adversely affect our business.

We rely to a large extent upon sophisticated information technology systems to operate our business. In the ordinary course of business, we collect, store and transmit large amounts of confidential information (including, but not limited to, personal information and intellectual property). We also have outsourced significant elements of our operations to third parties, including significant elements of our information technology infrastructure and, as a result, we are managing many independent vendor relationships with third parties who may or could have access to our confidential information. The size and complexity of our information technology and information security systems, and those of our third-party vendors with whom we contract (and the large amounts of confidential information that is present on them), make such systems potentially vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees or vendors, or from malicious attacks by third parties. Such attacks are of ever-increasing levels of sophistication and are made by groups and individuals with a wide range of motives (including, but not limited to, industrial espionage and market manipulation) and expertise. While we have invested significantly in the protection of data and information technology, there can be no assurance that our efforts will prevent service interruptions or security breaches. Any interruption or breach in our systems could adversely affect our business operations and/or result in the loss of critical or sensitive confidential information or intellectual property, and could result in financial, legal, business and reputational harm to us or allow third parties to gain material, inside information that they use to trade in our securities.

Risks Related to Commercialization of Our Current and Future Product Candidates

Our commercial success depends upon attaining significant market acceptance of our current and future product candidates, if approved, among physicians, patients, healthcare payors and cancer treatment centers.

Even if we obtain regulatory approval for any of our current or future product candidates, the product may not gain market acceptance among physicians, healthcare payors, patients or the medical community, including cancer treatment centers. Market acceptance of any product candidates for which we receive approval depends on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in clinical trials;
- the clinical indications and patient populations for which the product candidate is approved;
- acceptance by physicians, major cancer treatment centers and patients of the drug as a safe and effective treatment;
- the adoption of novel immunotherapies by physicians, hospitals and third-party payors;
- the potential and perceived advantages of product candidates over alternative treatments;
- the safety of product candidates seen in a broader patient group, including our use outside the approved indications;
- any restrictions on use together with other medications;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- the timing of market introduction of our products as well as competitive products;
- the development of manufacturing and distribution processes for commercial scale manufacturing for our novel WT1 peptide cancer immunotherapy product candidate;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- relative convenience and ease of administration; and
- the effectiveness of our sales and marketing efforts and those of our collaborators.

If any of our current and future product candidates are approved but fail to achieve market acceptance among physicians, patients, healthcare payors or cancer treatment centers, we will not be able to generate significant revenues, which would compromise our ability to become profitable.

Even if we are able to commercialize our current or future product candidates, the products may not receive coverage and adequate reimbursement from third-party payors in the United States and in other countries in which we seek to commercialize our products, which could harm our business.

Our ability to commercialize any product successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations.

Government authorities and third-party payors, such as private health insurers and health maintenance organizations, determine which medications they will cover and establish reimbursement levels. A primary trend in the healthcare industry is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Third-party payors may also seek additional clinical evidence, beyond the data required to obtain regulatory approval, demonstrating clinical benefit and value in specific patient populations before covering our products for those patients. We cannot be sure that coverage and adequate reimbursement will be available for any product that it commercializes and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain regulatory approval. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any product candidate for which we obtain regulatory approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may only be temporary. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors in the United States often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that it develops could have a material adverse effect on our operating results, ability to raise capital needed to commercialize products and overall financial condition.

Recently enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of and commercialize our current or future product candidates and affect the prices we may obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay regulatory approval of our current or future product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell any product candidates for which we obtain regulatory approval. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of our product candidates, if any, may be.

In the United States, the European Union and other potentially significant markets for our current and future product candidates, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. Furthermore, the increased emphasis on managed healthcare in the United States and on country and regional pricing and reimbursement controls in the European Union will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

Price controls may be imposed in foreign markets, which may adversely affect our future profitability.

In some countries, particularly member states of the European Union, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of regulatory approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we or our collaborators may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be adversely affected.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain regulatory approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we would market, sell and distribute our products. As a pharmaceutical company, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. Restrictions under applicable federal and state healthcare laws and regulations that may affect our ability to operate include the following:

- the federal healthcare Anti-Kickback Statute will constrain our marketing practices, educational programs, pricing policies, and relationships with healthcare providers or other entities, by prohibiting, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- federal civil and criminal false claims laws and civil monetary penalty laws impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment or approval that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- HIPAA imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also created federal criminal laws that prohibit knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services;

[Table of Contents](#)

- HIPAA, as amended by HITECH, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal physician sunshine requirements under the Patient Protection Affordable Care Act requires manufacturers of drugs, devices, biologics and medical supplies to report annually to HHS information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations;
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers; and
- state and foreign laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

[Table of Contents](#)

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our current or future product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. Product liability claims may be brought against us by subjects enrolled in our clinical trials, patients, healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- termination of clinical trial sites or entire trial programs;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial subjects or patients;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize any products that we may develop.

We currently hold product liability insurance coverage at a level that we believe is customary for similarly situated companies and adequate to provide us with insurance coverage for foreseeable risks, but which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. We intend to expand our insurance coverage for products to include the sale of commercial products if we obtain regulatory approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products that receive regulatory approval. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

Risks Related to our Business Operations

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

We face competition from numerous pharmaceutical and biotechnology enterprises, as well as from academic institutions, government agencies and private and public research institutions for our current product candidates. Our commercial opportunities will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any products that we may develop. Competition could result in reduced sales and pricing pressure on our current or future product candidates, if approved, which in turn would reduce our ability to generate meaningful revenues and have a negative impact on our results of operations. In addition, significant delays in the development of our product candidates could allow our competitors to bring products to market before we and impair any ability to commercialize our product candidates. The biotechnology industry, including the cancer immunotherapy market, is intensely competitive and involves a high degree of risk. We compete with other companies that have far greater experience and financial, research and technical resources than us. Potential competitors in the United States and worldwide are numerous and include pharmaceutical and biotechnology companies, educational institutions and research foundations, many of which have substantially greater capital resources, marketing experience, research and development staffs and facilities than ours. Some of our competitors may develop and commercialize products that compete directly with those incorporating our technology, introduce products to market earlier than our products or on a more cost effective basis. In addition, our technology may be subject to competition from other technology or methods developed using techniques other than those developed by traditional biotechnology methods. Our competitors compete with us in recruiting and retaining

[Table of Contents](#)

qualified scientific and management personnel as well as in acquiring technologies complementary to our technology. Our company and our collaborators may face competition with respect to product efficacy and safety, ease of use and adaptability to various modes of administration, acceptance by physicians, the timing and scope of regulatory approvals, availability of resources, reimbursement coverage, price and patent position, including the potentially dominant patent positions of others. An inability to successfully complete our product development or commercializing those product candidates could lead having limited prospects for establishing market share or generating revenue from our technology.

There are several agents in clinical development in similar settings to our planned Phase 3 AML clinical development program for GPS. The most advanced of these products is oral Vidaza (azacytidine), under development by Celgene Corporation, which is anticipated to report Phase 3 results by the end of 2018. There are a number of other investigational immunotherapies advancing through Phase 2 and Phase 3 trials for target indications that we believe are also potential target indications for GPS. If these or other therapies are successful in their development, it could negatively impact our ability to enroll our clinical trials and could negatively impact the commercial potential of GPS.

We are also planning a clinical development program in combination with cancer checkpoint inhibitors. This is a highly competitive field, with hundreds of such combination trials with various checkpoint inhibitors ongoing. If one or more of these combinations produce positive results in indications which we believe are targets for GPS (either in combination or in stand-alone administration) this could increase the difficulty for us to conduct our trials and could negatively impact our path to regulatory approval and our ability to successfully commercialize our products.

Many of our competitors or potential competitors have significantly greater established presence in the market, financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than it does, and as a result may have a competitive advantage over us. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business.

As a result of these factors, these competitors may obtain regulatory approval of their products before we are able to obtain patent protection or other intellectual property rights, which will limit our ability to develop or commercialize our current or future product candidates. Our competitors may also develop drugs that are safer, more effective, more widely used and cheaper than ours, and may also be more successful than us in manufacturing and marketing their products. These appreciable advantages could render our product candidates obsolete or noncompetitive before we can recover the expenses of development and commercialization.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our current or future product candidates, we may be unable to generate any revenue.

We do not currently have an organization for the sale, marketing and distribution of pharmaceutical products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved by the FDA and comparable foreign regulatory authorities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. There are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our

[Table of Contents](#)

internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenues and may not become profitable. We will be competing with many companies that currently have extensive and well-funded sales and marketing operations. Without an internal commercial organization or the support of a third party to perform sales and marketing functions, we may be unable to compete successfully against these more established companies. If we are not successful in commercializing our current or future product candidates either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we would incur significant additional losses.

We will need to grow the size of our organization, and we may experience difficulties in managing this growth.

As of April 6, 2018, we had eleven full-time employees. We need to grow the size of our organization in order to support our continued development and potential commercialization of our product candidates. In particular, we will need to add substantial numbers of additional personnel and other resources to support our development and potential commercialization of our product candidates. As our development and commercialization plans and strategies continue to develop, or as a result of any future acquisitions, our need for additional managerial, operational, manufacturing, sales, marketing, financial and other resources will increase. Our management, personnel and systems currently in place may not be adequate to support this future growth. Future growth would impose significant added responsibilities on members of management, including:

- managing our clinical trials effectively;
- identifying, recruiting, maintaining, motivating and integrating additional employees;
- managing our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors and other third parties;
- improving our managerial, development, operational, information technology, and finance systems; and
- expanding our facilities.

As our operations expand, we will also need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and preclinical studies and clinical trials effectively and hire, train and integrate additional management, research and development, manufacturing, administrative and sales and marketing personnel. The failure to accomplish any of these tasks could prevent us from successfully growing our company.

If we fail to develop and maintain proper and effective internal control over financial reporting, the accuracy and timeliness of our financial reporting may be adversely affected.

Our management team is required, pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. In particular, we are required to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of its internal control over financial reporting. Prior to the Merger, Private SELLAS, whose financial statements are now our financial statements, was not required to do such an analysis. Testing may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. We were informed by our independent registered public accounting firm that we have a material weakness in our internal control over financial reporting due to our lack of sufficient management and personnel with appropriate expertise in GAAP and SEC rules and regulations with respect to financial reporting. Although, we have since hired three additional finance and accounting personnel to build out our infrastructure and further develop and document our accounting policies and financial reporting procedures, we cannot assure you that we will be successful in retaining these new hires or that these measures will significantly improve or remediate the material weakness described above, or any others that it may identify once we conduct a full Section 404 evaluation. We also cannot assure you that we have identified all material weaknesses at this time, or that additional material weaknesses may occur in the future. Accordingly, material weaknesses may still exist.

[Table of Contents](#)

Our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting for so long as we remain a “smaller reporting company” as defined in applicable SEC regulations. Our management team is required to disclose changes made in our internal controls and procedures on a quarterly basis. We need to undertake various actions, such as implementing new internal controls and procedures and hiring additional accounting or internal audit staff. Our audit committee must also be advised and regularly updated on management’s review of internal controls. We are still in early stages of the costly and challenging process of compiling the system and processing documentation necessary to perform our evaluation of its internal control over financial reporting needed to comply with Section 404, and we may not be able to complete its evaluation, testing and any required remediation in a timely fashion. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner or if it identifies or its independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our common stock could decline and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities, which would require additional financial and management resources.

The requirements of being a public company may strain our resources, divert management’s attention and affect our ability to attract and retain qualified board members.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of Nasdaq and other applicable securities rules and regulations. Compliance with these rules and regulations has increased, and will likely continue to increase, our legal and financial compliance costs, make some activities more difficult, time-consuming or costly, and place significant strain on our personnel, systems and resources. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time. This could result in continuing uncertainty regarding compliance matters, higher administrative expenses and a diversion of management’s time and attention. Further, if our compliance efforts differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed. Being a public company that is subject to these rules and regulations also makes it more expensive for us to obtain and retain director and officer liability insurance, and we may in the future be required to accept reduced coverage or incur substantially higher costs to obtain or retain adequate coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors and qualified executive officers.

We may become involved in securities class action litigation that could divert management’s attention and harm our business, and insurance coverage may not be sufficient to cover all costs and damages.

In the past, securities class action or stockholder derivative litigation often follows certain significant business transactions, such as the sale of a business division or announcement of a merger. We may become involved in this type of litigation in the future. Litigation often is expensive and diverts management’s attention and resources, which could adversely affect the continuing company’s business.

Our future success depends on our ability to retain our executive officers and to attract, retain and motivate qualified personnel.

We are highly dependent upon our personnel, including Dr. Angelos M. Stergiou (M.D., Sc.D. h.c.), our President and Chief Executive Officer, and member of our board of directors. Our employment agreement with Dr. Stergiou does not prevent him from terminating his employment with us at any time. The loss of Dr. Stergiou’s services could impede the achievement of our research, development and commercialization objectives. We have not obtained, do not own, nor are we the beneficiary of, key-person life insurance.

[Table of Contents](#)

Governance changes, becoming subject to enhanced regulatory requirements and increased responsibilities associated with becoming a public company may influence our management personnel and our employees to terminate their employment with us. To enhance our ability to retain our executive management personnel, we have entered into retention agreements with certain executive officers and may find it beneficial to enter into additional retention agreements with other key personnel in the future, potentially increasing payroll and operating expenses.

Our future growth and success depend on our ability to recruit, retain, manage and motivate our employees. The loss of any member of our senior management team or the inability to hire or retain experienced management personnel could compromise our ability to execute our business plan and harm our operating results. Because of the specialized scientific and managerial nature of our business, we rely heavily on our ability to attract and retain qualified scientific, technical and managerial personnel. The competition for qualified personnel in the pharmaceutical field is intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the development of our business.

If we and our third-party manufacturers fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We and our third-party manufacturers are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from us or our third-party manufacturers' use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover the costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials with a policy limit that we believe is customary for similarly situated companies and adequate to provide us with insurance coverage for foreseeable risks, this insurance may not provide adequate cover age against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions, which could adversely affect our business, financial condition, results of operations and prospects.

Our business and operations would suffer in the event of computer system failures or security breaches.

Our internal computer systems, and those of MSK, our CROs, our CMOs, and other business vendors on which we rely, are vulnerable to damage from computer viruses, unauthorized access, natural disasters, fire, terrorism, war and telecommunication and electrical failures. We exercise little or no control over these third parties, which increases our vulnerability to problems with their systems. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, the further development of our current and future product candidates could be delayed and our business could be otherwise adversely affected.

Business disruptions could seriously harm our future revenues and financial condition and increase our costs and expenses.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or manmade disasters or business interruptions, for which We are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce our product candidates and intends to rely on third-party manufacturers to produce any future product candidates. Our ability to obtain clinical supplies of product candidates could be disrupted, if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. The ultimate impact on us, our significant suppliers and our general infrastructure is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire, hurricane or other natural disaster.

Our principal stockholders own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Our principal stockholders and their affiliates currently beneficially own approximately 46% of the outstanding shares of our common stock. Therefore, these stockholders have the ability and may continue to have the ability to influence us through this ownership position. These stockholders may be able to determine some or all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors, amendments of organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for shares of our common stock that you may believe are in your best interest as one of our stockholders.

Risks Relating to Ownership of Our Common Stock

The market price and trading volume of shares of our common stock may be volatile.

The market price of shares of our common stock has exhibited substantial volatility recently. Between January 1, 2017 and April 6, 2018, the trading price of shares of our common stock as reported on Nasdaq ranged from a low of \$3.43 to a high of \$72.30. The market price of shares of our common stock could continue to fluctuate significantly for many reasons, including the following factors:

- reports of the results of our clinical trials regarding the safety or efficacy of our product candidates and surrogate markers;
- announcements of regulatory developments or technological innovations by us or our competitors;
- announcements of business or strategic transactions or our success in finalizing such a transaction;
- announcements of legal or regulatory actions against us or any adverse outcome of any such actions;
- changes in our relationships with our licensors, licensees and other strategic partners;
- low volume in the number of shares of our common stock traded on Nasdaq;
- our quarterly operating results;
- announcements of dilutive financing;
- announcements of additional potential reverse stock split;
- developments in patent or other technology ownership rights;
- additional funds may not be available on terms that are favorable to us and, in the case of equity financings, may result in dilution to our stockholders;
- government regulation of drug pricing; and
- general changes in the economy, the financial markets or the pharmaceutical or biotechnology industries.

Factors beyond our control may also have an impact on the market price of shares of our common stock. For example, to the extent that other companies within our industry experience declines in their stock prices, the market price of shares of our common stock may decline as well.

Future sales of substantial amounts of our common stock, or the possibility that such sales could occur, could adversely affect the market price of our common stock.

Future sales in the public market of shares of our common stock, including shares referred to in the foregoing risk factors or shares issued upon exercise of our outstanding stock options or warrants, or the perception by the market that these sales could occur, could lower the market price of our common stock or make it difficult for us to raise additional capital.

As of December 31, 2017, we had reserved for issuance 10,171 shares of our common stock issuable upon the exercise of outstanding stock options at a weighted-average exercise price of \$1,240.54 per share and 963,000 shares of our common stock issuable upon the exercise of outstanding warrants at a weighted-average exercise price of \$94.58 per share. Upon exercise of these options and warrants, the underlying shares may be resold into the public market. In the case of outstanding options and warrants that have exercise prices that are below the market price of our common stock from time to time, our stockholders would experience dilution upon the exercise of these options.

We have issued and may issue additional preferred stock in the future, and the terms of the preferred stock may reduce the value of our common stock.

We are authorized to issue up to 5 million shares of preferred stock in one or more series. Our Board of Directors may determine the terms of future preferred stock offerings without further action by our stockholders. If we issue additional preferred stock, it could affect stockholder rights or reduce the market value of our outstanding common stock. In particular, specific rights granted to future holders of preferred stock may include voting rights, preferences as to dividends and liquidation, conversion and redemption rights, sinking fund provisions, and restrictions on our ability to merge with or sell our assets to a third party.

Our Board of Directors has designated 17,500 shares of our preferred stock as our Series A Convertible Preferred and we have issued or agreed to issue up to an aggregate of 10,700 shares of such Series A Convertible Preferred. The Series A Convertible Preferred is initially convertible into our common stock based on an initial conversion price of \$5.80 per share, which is subject to adjustment in certain circumstances, including anti-dilution price protection through completion of a “Qualified Offering” as defined in the terms of such Series A Convertible Preferred set out in the Certificate of Designation.

We have in the past and expect in the future to settle legal claims through the issuance of freely tradable shares of our common stock, which will result in dilution to holders of our common stock and may adversely affect the market price of our common stock

We have in the past and expect in the future to settle legal claims through the issuance of freely tradable shares of our common stock. As described under the heading, Our Business—Legal Proceedings, we currently expect to (i) issue \$1,250,000 in unrestricted shares of our common stock valued at based on the volume-weighted average closing price for the 20 trading days immediately preceding the day before the transfer of the settlement stock to the settlement fund to settle the case entitled *Patel vs. Galena Biopharma, Inc. et. al* and (ii) \$200,000 in cash to settle the claim for attorneys’ fees in the pending qui tam action in the U.S. District Court of the District of New Jersey. Payment of these amounts in our common stock will cause significant dilution to our stockholders, and the amount of that dilution will vary depending on the price of our common stock at the time of the payment (and the 20 trading days prior to such payment in the case of payments made in connection with the *Patel* litigation). In addition, the issuance of such a significant number of shares of our may cause a decrease in the trading price of our common stock.

Our senior secured debenture has resulted, and may continue to result, in dilution to the holders of our common stock.

In May 2016, Galena entered into a securities purchase agreement with JGB, pursuant to which Galena sold to JGB, at a 6.375% original issue discount, a \$25,530,000 senior secured debenture, which was subsequently amended, and warrants to purchase Galena's common stock. As of December 31, 2017, (i) there were 5,766,891 shares of our common stock outstanding and (ii) 647,061 shares of our common stock had been issued by us pursuant to the terms of the senior secured debenture. As of April 6, 2018, we issued an additional 635,894 shares of our common stock to satisfy \$3.2 million of outstanding principal and interest redemptions. Assuming all the shares issuable pursuant to the terms of the senior secured debenture subsequent to April 6, 2018 are issued at a stock payment price of \$3.23 the lowest stock payment price as of April 6, 2018, we estimate that the maximum number of shares of common stock that we could issue pursuant to the terms of the senior secured debenture subsequent to April 6, 2018 is approximately 372,443.

We may enter or amend our senior secured debenture and with respect to our other liabilities which may result or continue to result, in dilution to the holders of our common stock.

Anti-takeover provisions of our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws and provisions of Delaware law could delay or prevent a change of control.

Anti-takeover provisions of our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws may discourage, delay or prevent a merger or other change of control that stockholders may consider favorable or may impede the ability of the holders of our common stock to change our management and may be constrained by other contractual agreements with third parties. These provisions of our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws, among other things:

- divide our Board of Directors into three classes, with members of each class to be elected for staggered three-year terms;
- limit the right of securityholders to remove directors;
- prohibit stockholders from acting by written consent;
- regulate how stockholders may present proposals or nominate directors for election at annual meetings of stockholders; and
- authorize our Board to issue preferred stock in one or more series, without stockholder approval.

In addition, Section 203 of the Delaware General Corporation Law provides that, subject to limited exceptions, persons that acquire, or are affiliated with a person that acquires, more than 15% of the outstanding voting stock of a Delaware corporation such as We shall not engage in any business combination with that corporation, including by merger, consolidation or acquisitions of additional shares for a three-year period following the date on which that person or our affiliate crosses the 15% stock ownership threshold. Section 203 could operate to delay or prevent a change of control of us.

The terms of our outstanding indebtedness may inhibit potential acquirers.

We are prohibited by the terms of our outstanding indebtedness from disposing of any of our business or property, except with the consent of our lenders or if we were to prepay, which we are not able to do without our lenders consent, the outstanding indebtedness and related fees in accordance with the loan security agreement. Our outstanding indebtedness may inhibit potential acquirers or other interested parties from seeking to acquire all or a part of our business or assets, and there is no assurance that our lenders would consent to any proposed future transaction that might be beneficial to our stockholders.

If our common stock becomes subject to the penny stock rules, it may be more difficult to sell our common stock.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system). The OTC Bulletin Board does not meet such requirements and if the price of our common stock is less than \$5.00 and our common stock is no longer listed on a national securities exchange such as Nasdaq, our may be deemed a penny stock. The penny stock rules require a broker-dealer, at least two business days prior to a transaction in a penny stock not otherwise exempt from those rules, to deliver to the customer a standardized risk disclosure document containing specified information and to obtain from

[Table of Contents](#)

the customer a signed and date acknowledgement of receipt of that document. In addition, the penny stock rules require that prior to effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive: (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stockholders may have difficulty selling their shares.

We have never declared or paid cash dividends on our capital stock and we do not anticipate paying cash dividends in the foreseeable future.

Our business requires significant funding. We currently plan to invest all available funds and future earnings in the development and growth of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future and are prohibited by the terms of our outstanding indebtedness from paying dividends on any common stock, except with the prior consent of our lenders. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of potential gain for the foreseeable future.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We relocated our headquarters to New York, New York following completion of the Merger and occupy 2,033 square feet of office space in New York, New York under a lease that expires in April 2019. We believe that our facilities are adequate for our current needs.

Prior to the Merger, Private SELLAS occupied 1,750 square feet of office space in Hamilton, Bermuda under a lease that expired in November 2017. In December 2017, we terminated the lease for our pre-Merger headquarters located at 2000 Crow Canyon Place, Suite 380, San Ramon, CA 94583.

ITEM 3. LEGAL PROCEEDINGS

Our predecessor company, Galena was involved in multiple legal proceedings and administrative actions, including stockholder class actions, both state and federal, some of which are ongoing and to which we are now subject as a result of the Merger. They are as follows:

[Table of Contents](#)

On December 16, 2015, we received a subpoena issued by the U.S. Attorney's Office for the District of New Jersey, or USAO NJ, requesting the production of a broad range of documents pertaining to our marketing and promotional practices for Abstral, which we had sold to a third party in the fourth quarter of 2015. In September 2017, the Department of Justice announced that we were to pay more than \$7.55 million to resolve allegations under the civil False Claims Act that we paid kickbacks to doctors to induce them to prescribe our fentanyl-based drug Abstral. On December 29, 2017, we fully paid the civil payment to resolve those allegations and the \$0.2 million in attorneys' fees.

On February 13, 2017, putative shareholder securities class action complaints were filed in federal court alleging, among other things, that we and certain of our former officers and directors and current employee failed to disclose that our promotional practices for Abstral (fentanyl) sublingual tablets were allegedly improper and that we may be subject to civil and criminal liability, and that these alleged failures rendered our statements about our business misleading. The actions were consolidated, a lead plaintiff was named by the court and an amended complaint was filed. We filed a motion to dismiss the amended complaint and the briefing should be completed by April of 2018. Thereafter, the Court will take the matter under advisement. It is not known when the Court will issue a ruling in this matter.

On March 16, 2017, a derivative complaint was filed in the federal court against our current directors and us, as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on our behalf against our directors based on substantially similar facts as alleged in the putative shareholder securities class action complaints filed in February 2017 mentioned above. This lawsuit is currently stayed pending resolution of the referenced securities class action lawsuit.

In April 2017, a putative stockholder class action was filed in Delaware state court seeking relief under Section 225 of the DGCL and alleging breaches of fiduciary duties by our former board of directors and former interim chief executive officer regarding the proposals to amend Galena's certificate of incorporation to increase the amount of authorized shares of common stock and effectuate a reverse stock split at the July 2016 and October 2016 stockholder meetings, respectively. On June 2, 2017, an amended verified complaint was filed along with a motion to expedite the proceedings. On June 5, 2017, Galena filed a verified petition under Section 205 of the DGCL and a motion to expedite the proceedings. On June 8, 2017, the Court denied a request by the plaintiff to schedule a preliminary injunction motion and ordered a prompt trial on both the plaintiff and Galena's claims. On June 20, 2017, the Court consolidated the claims into *In re Galena Biopharma, Inc.*, C. A. No. 2017-0423-JTL. On July 10, 2017, the Court ordered that the trial of the claims be held on August 28, 30 and 31, 2017. On July 24, 2017, we entered into a binding settlement term sheet involving the payment of \$50,000 in cash and \$1,250,000 in unrestricted shares of our common stock. The Court enforced the settlement term sheet on November 30, 2017, over the objection of the plaintiff. On December 8, 2017, the Court set the hearing on the settlement for March 15, 2018. On December 11, 2017, the Court also granted an order validating the ratification votes at the special stockholder meeting held on July 6, 2017 and the certificate of amendments filed by the Company for the increase in authorized shares in 2011, 2013, 2015, and 2016 as well as for the reverse stock split in 2016. On February 22, 2018, the plaintiff filed his brief in support of the settlement as well as his request for attorneys' fees and an incentive award. On March 1, 2018, the former directors and former interim chief executive officer responded to plaintiff's brief. On February 28, 2018, the former directors and former interim chief executive officer requested the Court continue the date of the hearing to approve the settlement as we were working with the staff of the SEC to obtain the no-action letter required by the binding settlement term sheet. The Plaintiff objected to such continuance. On March 15, 2018, the Court ruled in favor of us and continued the settlement hearing for 90 days.

[Table of Contents](#)

On April 10, 2017, the SEC issued a cease and desist order against we and the former chief executive officer, or CEO, Mark Ahn, requiring each of them to cease and desist from any future violations of Sections 5(a), 5(b), 5(c), 17(a), and 17(b) of the Securities Act of 1933, as amended, or the Securities Act, and Section 10(b), 13(a), and 13(b)(2)(A) of the Exchange Act, and various rules thereunder, which refer to as the SEC Order. Based upon the order, we made a \$0.2 million penalty payment as well as a payment of approximately \$0.75 million, which was the indemnification payment of our former CEO for the disgorgement and prejudgment interest payment that he was required to pay by the order. We made such indemnification payment after a special committee of the board of directors determined that we were required under Delaware law to indemnify our former CEO for the disgorgement and prejudgment interest payment. The former CEO also made a penalty payment of \$0.6 million. As a result of the SEC Order, we may not use certain exemptions from registration under the federal securities laws, including Regulation A and Regulation D. In addition, we are an “ineligible issuer” as the term is defined under Rule 405 promulgated under the Securities Act.

On July 2017, a complaint was filed in California state court against our former directors and us, as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on our behalf against our former directors based on substantially similar facts as alleged in the derivative complaint filed in early March of 2017 mentioned above. This lawsuit is currently stayed pending resolution of the referenced securities class action lawsuit.

On January 23, 2018, a complaint captioned was filed in the U.S. District Court for the District of New Jersey against our former directors, officers and employees and us as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on our behalf against our former directors, officers and employees based on substantially similar facts as alleged in the putative shareholder securities class action complaints and derivative complaints mentioned above, as well as making demand futility allegations against our current board of directors, who are not named as defendants. It is expected that we and the individual defendants will respond to the complaint through an appropriate pleading or motion and, if necessary, seek an order from the Court staying the proceedings pending further developments in the securities litigations described above.

On or about April 9, 2018, JGB filed a lawsuit in the U.S. District Court for the Southern District of New York captioned *JGB (Cayman) Newton, Ltd. v. Sellas Life Sciences Group, Inc., et al.*, Case 1:18-cv-3095 (DLC), or the JGB Action. The complaint in the JGB Action asserts claims under state law and federal securities law against us, our Chief Executive Officer, Angelos M. Stergiou, M.D., ScD H.C, and our Interim Chief Financial Officer, Aleksey N. Krylov (Mr. Krylov together with the Company and Dr. Stergiou, the Defendants). The complaint in the JGB Action alleges, among other things, that we breached a contractual obligation to deliver certain shares of our common stock to JGB and that, in the course of negotiations related to the senior secured debenture agreement, the Defendants failed to disclose to JGB certain information regarding positive clinical trial results that was not then public. According to the complaint, JGB seeks to receive 2,483,500 shares of our common stock, damages, and costs and expenses incurred in the JGB action, among other things. We dispute the claims in the JGB Action and intend to defend against them vigorously.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Information**

Throughout 2017, our common stock was listed on The Nasdaq Capital Market under the symbol "GALE". Upon completion of the Merger and upon the next trading day, on January 2, 2018, our common stock began trading on The Nasdaq Capital Market under the symbol "SLS". The following table shows the high and low per-share sale prices of our common stock for the periods indicated after taking effect for the 1-for-20 reverse stock split effected November 11, 2016 and the 1-for-30 reverse stock split effected December 29, 2017:

	<u>High</u>	<u>Low</u>
2016		
First Quarter	\$ 888.00	\$354.00
Second Quarter	1494.00	168.00
Third Quarter	462.00	186.00
Fourth Quarter	210.00	55.20
2017		
First Quarter	\$ 72.30	\$ 15.90
Second Quarter	20.40	15.60
Third Quarter	19.50	7.80
Fourth Quarter	13.20	7.80

 Holders

On April 6, 2018, the closing sale price of a share of our common stock was \$6.85 per share and there were 6,572,542 shares of our common stock outstanding. On that date, our shares of common stock were held by approximately 135 stockholders of record. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of our common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies.

 Dividends

We have never paid any cash dividends and do not anticipate paying any cash dividends on our common stock in the foreseeable future. We expect to retain future earnings, if any, for use in our development activities and the operation of our business. The payment of any future dividends will be subject to the discretion of our Board of Directors and will depend, among other things, upon our results of operations, financial condition, cash requirements, prospects and other factors that our Board of Directors may deem relevant. Our outstanding senior secured debenture with JGB restricts our ability to pay dividends. Series A Convertible Preferred stock issued in our March 2018 private placement limits our ability to pay dividends to the extent we have any unpaid dividends on such preferred stock. Our ability to pay future dividends may be restricted by the terms of any future securities we may issue.

[Table of Contents](#)

Equity Compensation Plan

The following table sets forth certain information as of December 31, 2017, regarding securities authorized for issuance under our equity compensation plans:

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted- Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by our security holders:			
Amended and Restated 2016 Incentive Plan	10,171	\$ 1,240.54	
2017 Equity Incentive Plan	—	NA	574,622
Employee Stock Purchase Plan	NA	NA	57,462
Restricted stock units	12,759	NA	—
Equity compensation plans not approved by our security holders:			
Outstanding warrants (1)	320,298	\$ 15.13	—
Total	<u>343,228</u>	\$ 52.84	<u>632,084</u>

- (1) The warrants shown were issued in discrete transactions from time to time as compensation for services rendered by consultants, advisers or other third parties, and do not include warrants sold in private placement or public offering transactions. The material terms of such warrants were determined based upon arm's-length negotiations with the services providers. The warrant exercise prices approximated the market price of our common stock at or about the date of grant, and the warrant terms range from three to ten years from the grant date.

Recent Sales of Unregistered Securities

During the period covered by this annual report, there were no sales by us of unregistered securities that were not previously reported by us in a Quarterly Report on Form 10-Q or Current Report on Form 8-K.

Purchases of Equity Securities

During the year ended December 31, 2017, we did not purchase any of our equity securities.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with the consolidated financial statements and the notes to consolidated financial statements included elsewhere in this annual report on Form 10-K. This discussion contains forward-looking statements within the meaning of federal securities laws. Such forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those contained in such forward-looking statements, including those discussed in the section "Risk Factors" in Part I — Item 1A of this annual report on Form 10-K.

Please see Part I, item 1 "Business—Collaboration and License Agreements" and Note 6 to our audited consolidated financial statements appearing elsewhere in this annual report on Form 10-K for more information relating to such arrangements.

Recent Developments

Merger of Galena Biopharma, Inc., or Galena and SELLAS Life Sciences Group Ltd.

On December 29, 2017, we completed the business combination with Private SELLAS, in accordance with the terms of the Merger. We refer to this business combination throughout this annual report on Form 10-K as the Merger. As a result of the Merger, our business is now substantially comprised of the business of Private SELLAS, and although we are considered the legal acquiror of Private SELLAS, for accounting purposes, Private SELLAS is considered have acquired our company in the Merger. Consequently, the Merger is accounted for as a reverse acquisition and our financial statements are now those of Private SELLAS.

Immediately prior to the Merger, we effected a 1-for-30 reverse stock split of our outstanding common stock. Under the terms of the Merger Agreement, we issued shares of our common stock to Private SELLAS' securityholders at an exchange ratio of 43.9972 shares of our common stock in exchange for each common share of Private SELLAS outstanding immediately prior to the Merger. We also assumed all of the restricted stock units, or RSUs issued and outstanding under the Private SELLAS Stock Incentive Plan #1, and all of the issued and outstanding warrants of Private SELLAS. Accordingly, such RSUs will now be settled in, and such warrants now are exercisable for, shares of our common stock. Accordingly, immediately after the Merger, there were approximately 5,766,891 shares of our common stock outstanding, with the former Private SELLAS securityholders owning approximately 67.5% of our fully diluted common stock, and our pre-Merger securityholders owning the remaining approximately 32.5%.

Upon completion of the Merger, we changed our name from "Galena Biopharma, Inc." to "SELLAS Life Sciences Group, Inc" and our common stock began trading on The Nasdaq Capital Market under a new ticker symbol "SLS" on January 2, 2018, and our financial statements became those of Private SELLAS.

Private Placement of Series A 20% Convertible Preferred Stock and Warrants

In March 2018, we entered into a securities purchase agreement with investors pursuant to which we agreed to sell to the investors, in a private placement pursuant to Rule 4(a)(2) and Regulation S under the Securities Act of 1933, as amended, an aggregate of 10,700 shares of our newly-created non-voting Series A Convertible Preferred and warrants to acquire an aggregate 1,383,631 shares of our common stock at an aggregate purchase price of \$10.7 million. The Series A Convertible Preferred is initially convertible into 1,844,835 shares of our common stock based on an initial conversion price of \$5.80 per share,

The conversion price of the Series A Convertible Preferred and the exercise price of the warrants are both subject to adjustment for certain transactions affecting our securities (such as stock dividends, stock splits, and the like). Until consummation of a qualified offering (as such term is defined in the applicable documents), the conversion price and exercise price (for a one-year period after consummation of such qualified offering) are also subject to anti-dilution price protection in the event of non-exempt equity issuances at a price per share lower than the then applicable conversion or exercise price, as the case may be. If we have not consummated a qualified offering on or before September 9, 2018 (the six month anniversary of the first closing), on each of the six month anniversary of the first and the second closings, the conversion price is reduced to the lesser of (x) the then applicable conversion price, (y) \$3.00 (subject to adjustment for forward and reverse stock splits and the like) and (z) the lowest volume weighted average price, or VWAP, or for any trading day during the five trading days immediately following each such adjustment date.

[Table of Contents](#)

At the first closing of the of the private placement on March 9, 2018, we issued an aggregate 5,987 shares of Series A Convertible Preferred and warrants to acquire 774,186 shares of our common stock for aggregate gross proceeds of \$6.0 million. The second closing of the remaining 4,713 shares of Series A Convertible Preferred and warrants to acquire an aggregate of 609,445 shares of our Common Stock, for aggregate gross proceeds of \$4.7 million, will occur within five business days of receipt of necessary stockholder approval under the applicable rules and regulations of the Nasdaq Stock Market LLC. We agreed to seek stockholder approval no later than May 7, 2018 (within 60 days of the date of the securities purchase agreement), and will file proxy materials with the SEC in connection therewith.

Overview

We are a clinical-stage biopharmaceutical company focused on novel cancer immunotherapeutics for a broad range of cancer indications. Our lead product candidate, GPS, is a cancer immunotherapeutic agent licensed from MSK, that targets the WT1, protein, which is present in 20 or more cancer types. Based on its mechanism of action as a directly immunizing agent, GPS has the potential as a monotherapy or in combination with other immunotherapeutic agents to address a broad spectrum of hematologic, or blood, cancers and solid tumor indications. Phase 2 clinical trials for GPS have been completed and we have planned Phase 3 clinical trials (pending funding availability) for two indications AML, and or MPM. GPS is also in development as a potential treatment for multiple myeloma, or MM, and ovarian cancer. We plan to study GPS in up to four additional indications: as a combination therapy in small cell lung cancer, colorectal cancer, triple-negative breast cancer; and, as a monotherapy, in CML. We received Orphan Drug Product Designations from the FDA as well as Orphan Medicinal Product Designations from the EMA, for GPS in AML and MPM, as well as Fast Track Designation for AML and MPM from the FDA.

Our pipeline also includes the legacy development programs of our pre-Merger company, including novel cancer immunotherapy programs for NeuVax (nelipepimut-S; a vaccine against the E75 peptide derived from the human epidermal growth factor 2 -or HER2- protein), GALE-301 (a vaccine against the E39 peptide derived from the FBP) and GALE-302 (a vaccine against the J65 peptide derived from FBP) and our hematology asset, GALE-401 (a controlled release version of the approved drug anagrelide). NeuVax is currently in multiple investigator-sponsored Phase 2 clinical trials in breast cancer. GALE-301 and GALE-302 have completed early stage trials in ovarian, endometrial and breast cancers. GALE-401 is being developed for the treatment of elevated platelets in patients with MPNs, and we have completed a Phase 2 clinical trial in patients with ET for this clinical candidate. Since the closing of the Merger, management has been evaluating, GALE-301, GALE-302, and GALE-401 for potential internal development, strategic partnership, or other types of product rationalizations.

At December 31, 2017, we had cash and cash equivalents balances of \$2.3 million. We have incurred operating losses since inception, have not generated any product sales revenue and have not achieved profitable operations. We incurred a net loss of \$23.8 million and \$17.7 million for the years ended December 31, 2017 and 2016, respectively. Our accumulated deficit as of December 31, 2017, was \$54.2 million, and we expect to continue to incur substantial losses in future periods. We anticipate that our operating expenses will increase substantially as we continue to advance product candidates. We anticipate that our expenses will increase as we:

- complete our Phase 2 clinical trials and plan our Phase 3 clinical trials;
- continue the research, development and scale-up manufacturing capabilities to optimize products and dose forms for which we may obtain regulatory approval;
- maintain, expand and protect our global intellectual property portfolio;
- hire additional clinical, manufacturing, and scientific personnel; and
- add, acquire or develop operational, financial and management information systems and personnel, including personnel to support our drug development and potential future commercialization efforts.

[Table of Contents](#)

We intend to use our existing cash and cash equivalents for working capital and to fund the research and development of product candidates. We expect that our existing cash as of December 31, 2017, together with the proceeds from the first closing of our March 2018 private placement, will enable us to fund our operating expenses and capital expenditure requirements through June 2018. Assuming that all conditions to the initial closing are met, we expect an additional \$4.7 million of cash proceeds from the second closing of the sale of our Series A Convertible Preferred and warrants in the second quarter of 2018.

Collaboration and License Agreements

Although we currently have a number of collaborations with corporate partners for the development of our products in various territories worldwide, the following collaborations and license agreements are those that are most significant to us from a financial statement perspective and where significant ongoing collaboration activity exists.

Memorial Sloan Kettering Cancer Center

In September 2014, we entered into a license agreement with MSK, under which we were granted an exclusive license to develop and commercialize MSK's WT1 peptide vaccine technology. The MSK original license agreement was first amended in October 2015, further amended in August 2016, then amended and restated in May 2017 and further amended and restated in October 2017. In connection with the entry of the original license agreement and its amendments, MSK was issued or assigned an aggregate of 4,846 ordinary shares of Private SELLAS common stock for the year ended December 31, 2017. These common stock shares were converted into our common stock shares upon the Merger.

Under the terms of the current amended and restated MSK license agreement, we agreed to pay minimum royalty payments in the amount of \$0.1 million each year commencing in 2015 and research funding costs of \$0.2 million in each year and for three years commencing in January 2016. We also agreed to pay MSK a mid-six digit amount over a one year period in exchange for MSK's agreement to further amend and restate the MSK license agreement in October 2017. In addition, to the extent certain development and commercial milestones are achieved, we also agreed to pay MSK up to \$17.4 million in aggregate milestone payments for each licensed product, and for each additional patent licensed product, up to \$2.8 million in additional milestone payments. We also agreed to pay MSK a tiered royalty in the mid-single digits in the event of commercial sales of any licensed products and agreed to raise \$25.0 million in gross proceeds no later than December 31, 2018. In the event we do not raise such amount by December 31, 2018, MSK may terminate the license agreement after complying with the notice and cure periods of the agreement, or MSK may elect to receive additional shares of our capital stock in an amount equal to 1.5% of our then fully diluted share capital, which would stay the right to terminate for a period of time.

Unless terminated earlier in accordance with its terms, the MSK license agreement as amended and restated, will continue on a country-by-country and licensed product-by-licensed product basis, until the later of: (a) expiration of the last valid claim embracing such licensed product; (b) expiration of any market exclusivity period granted by law with respect to such licensed product; or (c) ten (10) years from the first commercial sale in such country.

For additional information on our collaboration arrangement with MSK, please read Note 6, *Collaborative and License Agreements*, to our consolidated financial statements included in this report.

Merck & Co., Inc.

In September 2017, we entered into a clinical trial collaboration and supply agreement through a Merck subsidiary, whereby we agreed with the Merck subsidiary to collaborate on a research program to evaluate GPS as it is administered in combination with their PD1 blocker pembrolizumab (Keytruda) in a Phase 1/2 clinical trial enrolling patients in up to five cancer indications, including both hematologic malignancies and solid tumors.

The Phase 1/2 clinical trial will utilize a combination of GPS plus pembrolizumab (Keytruda) in patients with WT1+ relapsed or refractory tumors. Specifically, the study is expected to explore the following cancer indications: colorectal (arm enriched in but not exclusive to patients with microsatellite instability-low), ovarian, small cell lung, triple-negative breast, and AML. This study will assess the efficacy and safety of the combination, comparing overall response rates and immune response markers achieved with the combination compared to prespecified rates based on those seen with pemrolizumab alone in comparable patient populations. The trial is anticipated to begin in the third quarter of 2018 (pending funding availability).

Advaxis, Inc.

In February 2017, we entered into a research and development collaboration agreement with Advaxis, Inc. whereby we agreed to collaborate in a research program to evaluate, through a "proof of principle" trial, or PoP trial, a clinical candidate comprised of the combination of Advaxis' proprietary Lm-based antigen delivery technology and GPS, our WT1 peptide. Unless terminated earlier in accordance with its terms, the Advaxis agreement will expire upon the earlier of: (a) completion of the PoP trial, (b) a decision by the parties to cease further development of the clinical candidate or (c) early termination pursuant to the terms of the Advaxis agreement.

[Table of Contents](#)

The Advaxis agreement provides for cost-sharing between the parties, with Advaxis being responsible for the costs of performing the research activities and filing any IND, cost-sharing for preparation of the IND, and us being responsible for the costs (exclusive of product costs) of conducting the PoP trial. We also agreed to make certain non-refundable milestone payments to Advaxis having an aggregate amount of up to \$108.0 million, upon meeting certain clinical, regulatory and commercial milestones. In addition, if net sales exceed certain targets, we agreed to make non-refundable sales milestone payments up to \$250.0 million and royalty payments based on specific royalty rates, with a maximum rate capped at a percentage rate in the low double digits if net sales exceed \$1.0 billion.

The University of Texas M. D. Anderson Cancer Center and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

In conjunction with the Merger and the acquisition of NeuVax, we acquired rights and assumed obligations under a license agreement among Aphera and MDACC and HJF which grants exclusive worldwide rights to a United States patent covering the nelipepimut-S peptide and several United States and foreign patents and patent applications covering methods of using the peptide as a vaccine.

Biovascular, Inc. License Agreement

In conjunction with the Merger, we acquired worldwide rights to anagrelide CR formulation, GALE-401, through our acquisition and Mills became a wholly owned subsidiary, Mills. GALE-401 contains the active ingredient anagrelide, an FDA-approved product that has been in use since the late 1990s for the treatment of MPNs. Mills holds an exclusive license to develop and commercialize anagrelide CR formulation, pursuant to the license agreement and its amendment with BioVascular.

Components of our Results of Operations

Research and Development Expense

Research and development expense consists of expenses incurred in connection with the discovery and development of our product candidates. We expense research and development costs as incurred. These expenses include:

- expenses incurred under agreements with CROs, as well as investigative sites and consultants that conduct our preclinical studies and clinical trials;
- manufacturing expenses;
- outsourced professional scientific development services;
- employee-related expenses, which include salaries, benefits and stock-based compensation;
- payments made under a third-party assignment agreement, under which we acquired intellectual property;
- expenses relating to regulatory activities, including filing fees paid to regulatory agencies;
- laboratory materials and supplies used to support our research activities; and
- allocated expenses, utilities and other facility-related costs.

[Table of Contents](#)

The successful development of our current and future product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of, or when, if ever, material net cash inflows may commence from any current or future product candidates. This uncertainty is due to the numerous risks and uncertainties associated with the duration and cost of clinical trials, which vary significantly over the life of a project as a result of many factors, including:

- the number of clinical sites included in the trials;
- the length of time required to enroll suitable patients
- the number of patients that ultimately participate in the trials;
- the number of doses patients receive;
- the duration of patient follow-up;
- the results of our clinical trials;
- the expenses associated with manufacturing;
- the receipt of marketing approvals; and
- the commercialization of current and future product candidates.

Our expenditures are subject to additional uncertainties, including the terms and timing of regulatory approvals. We may never succeed in achieving regulatory approval for any of our current or future product candidates. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some product candidates or target indications or focus on others. A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA, or other regulatory authorities were to require us to conduct clinical trials beyond those that we currently anticipate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development. Cancer immunotherapy product commercialization may take several years and millions of dollars in development costs.

Research and development activities are central to our business model. Cancer immunotherapy product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase significantly over the next several years as it increases personnel costs, including stock-based compensation, conducts clinical trials and prepares regulatory filings for our product candidates.

[Table of Contents](#)*General and Administrative Expense*

General and administrative expenses consist principally of salaries and related costs for personnel in executive, administrative, finance and legal functions, including stock-based compensation, travel expenses and recruiting expenses. Other general and administrative expenses include facility related costs, patent filing and prosecution costs and professional fees for business development, legal, auditing and tax services and insurance costs.

We anticipate that our general and administrative expenses will increase as a result of increased payroll, expanded infrastructure and an increase in accounting, consulting, legal and tax-related services associated with maintaining compliance with stock exchange listing and SEC requirements, investor relations costs, and director and officer insurance premiums associated with being a public company. We also anticipate that our general and administrative expenses will increase in support of our clinical trials as we expand and progress our development programs. Additionally, if and when we believe a regulatory approval of a product candidate appears likely, we anticipate an increase in payroll and expenses as a result of our preparation for commercial operations, particularly as it relates to the sales and marketing of such cancer immunotherapy product.

Interest Expense, Net

Interest expense, net primarily reflects interest expense incurred on our convertible term notes and other loans held with current and former stockholders, offset by the interest earned from our cash and cash equivalents.

Other Expense

Other expense consist of foreign currency exchange losses, value added tax, and management fees paid to Equilibria Capital Management, or EQC, Private SELLAS' strategic advisor and a significant stockholder in 2016.

Results of Operations for the Years Ended December 31, 2017 compared to the Year Ended December 31, 2016

The following table sets forth our results of operations for the years ended December 31, 2017 and 2016 (in thousands):

	<u>Year ended December 31,</u>		<u>Change</u>
	<u>2017</u>	<u>2016</u>	
Operating expenses:			
Research and development	\$ 6,067	\$ 11,395	\$ (5,328)
General and administrative	15,089	4,593	10,496
Severance costs	1,883	—	1,883
Loss from operations	(23,039)	(15,988)	7,051
Interest expense, net	462	1,166	(704)
Other expense	—	526	(526)
Loss from operations before income tax expense	(23,501)	(17,680)	5,821
Income tax expense	253	1	252
Net loss	<u>\$ (23,754)</u>	<u>\$ (17,681)</u>	<u>\$ 6,073</u>

Research and Development Expenses

Research and development expenses were \$6.1 million for the year ended December 31, 2017 compared to \$11.4 million for the year ended December 31, 2016. The \$5.3 million decrease was primarily attributable to a decrease of \$2.5 million in fees under licensing and collaboration agreements, a decrease of \$1.7 million in clinical trial expense, a \$1.3 million decrease in manufacturing expenses, a \$1.2 million decrease in consulting fees, and \$0.2 million in regulatory expenses. These decreases were partially offset by a \$0.7 million increase in stock-based compensation and a \$0.9 million increase in personnel related expenses. Overall, research and development expenses were reduced in 2017 as we explored various liquidity and capital raising options and focused our efforts on the Merger.

General and Administrative Expenses

General and administrative expenses were \$15.1 million for the year ended December 31, 2017 compared to \$4.6 million for the year ended December 31, 2016. The \$10.5 million increase was primarily driven by \$5.7 million of transaction costs incurred related to the Merger and a \$2.1 million increase in stock-based compensation from the acceleration of restricted stock units, a \$1.5 million increase in personnel related expenses, \$0.6 million in accounting and audit fees, and \$0.6 million in outside services. The \$5.7 million of transactions costs consist of \$2.9 million of banking fees, \$1.6 million in legal fees, \$1.0 million incentive fee payable through approximately \$0.1 million in cash and the issuance of 119,672 shares of our common stock upon consummation, and \$0.2 million in accounting and audit fees. The transaction costs incurred related to the Merger are non-recurring expenses for the year 2017.

Severance Costs

Severance costs incurred during the year ended December 31, 2017 include employee-related costs for severance of former Galena employees of \$1.9 million. The amount was paid by Galena prior to the consummation of the Merger and subsequently recognized as an expense by the combined company immediately following the closing of the Merger. The termination of former Galena employees resulted in contingent consideration being paid out in the form of severance based on change of control provisions in their employment agreements. Their employment agreements all required both a change of control and termination of employment, or a double trigger. Given that there was a change of control as a result of the Merger and Galena terminated all employees prior to the closing, with both provisions of the double trigger were satisfied, the severance is treated as an action triggered by the accounting acquirer, Private SELLAS. There were no severance costs for the year ended December 31, 2016.

Interest Expense, Net

Interest expense, net decreased \$0.7 million from \$1.2 million for the year ended December 31, 2016 to \$0.5 million for the year ended December 31, 2017. The decrease was driven by the reduction in our convertible debt during the period.

Income Taxes

For the years ended December 31, 2017 and 2016, we recognized income tax expenses of \$0.3 million and \$0.0 million, respectively.

Liquidity and Capital Resources

We have not generated any revenue from product sales, and in the years ended December 31, 2017 and 2016, we did not generate any revenue from collaboration and licensing agreements. Since inception, we have incurred net losses and have used net cash from our operations and have funded substantially all of our operations through proceeds of private placements and convertible notes. In December 2017, we completed the Merger and as a result, we acquired \$1.8 million in cash, and in March 2018, we closed on the \$6.0 million from our aggregate \$10.7 private placement of our Series A Convertible Preferred and warrants. In addition, in the first quarter of 2018, JGB redeemed \$2.6 million of outstanding principal, which we satisfied with 623,749 shares of our common stock and redeemed \$0.6 million of outstanding principal, which we satisfied in cash, permitting us to transfer \$3.2 million out of restricted cash and cash equivalents and into unrestricted cash and cash equivalents to be used to fund our ongoing operations. The outstanding principal balance on the senior secured JGB debenture as of April 6, 2018 is \$7.0 million and is maintained in restricted cash. We will require additional capital to fund our operations past June 2018. Alternatively, we will be required to scale back our plans and place certain activities on hold.

[Table of Contents](#)

While we have agreements for an “at-the-market” sales issuance facility with future availability of \$19.1 million, collectively, the ATM facility, its use is subject to certain terms and condition. We are not currently able to use the ATM facility, and do not expect to be eligible to use it until May 1, 2018 at the earliest, when we expect to be able to register certain offerings on Form S-3. However, until the market value of our common stock held by our non-affiliates increases to at least \$75 million, we will be limited in the amounts we may sell under Form S-3 registration statement.

As of December 31, 2017, we had an accumulated deficit of \$54.2 million, a total stockholders’ equity of \$2.1 million, and a cash balance of \$2.3 million and restricted cash of \$10.4 million. In addition, we had accounts payable and other accrued expenses of \$14.9 million and indebtedness of \$11.0 million as of December 31, 2017. Our outstanding indebtedness consists of our senior secured debenture with JGB, which is due November 2018. These matters raise substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments related to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty. We anticipate incurring additional losses until such time, if ever, that we can generate significant sales of any current or future product candidates in development.

This going concern assumption is based on management’s assessment of the sufficiency of our current and future sources of liquidity considering whether or not it is probable we will be able to meet our obligations as they become due for at least one year from the date of the issuance of our consolidated financial statements, and if not, whether our liquidation is imminent. Our management believes that our cash of \$2.3 million as of December 31, 2017, together with the proceeds from the first closing of our Series A Convertible Preferred will be sufficient to fund our planned operations through June 2018. Assuming that all conditions to the initial closing are met, we expect an additional \$4.7 million of cash proceeds from the second closing of the sale of our Series A Convertible Preferred and warrants in the second quarter of 2018. Substantial additional financing will be needed to fund our operations thereafter and to commercially develop any current or future product candidates. We currently do not have any commitments to obtain additional funds and may be unable to obtain sufficient funding in the future on acceptable terms, if at all. However, our management is currently evaluating different strategies to obtain the required funding for future operations. These strategies may include, but are not limited to: public and private placements of equity and/or debt, payments from potential strategic research and development, and licensing and/or marketing arrangements with pharmaceutical companies. Additionally, we continue to engage in active discussions with global and regional pharmaceutical companies for licensing and/or co-development rights to our late- and early-stage pipeline candidates. There can be no assurance that these future funding efforts will be successful. If we cannot obtain the necessary funding, we will need to delay, scale back or eliminate some or all of our research and development programs; consider other various strategic alternatives, including a merger or sale; or cease operations. However, at this stage our management does not believe liquidation is imminent.

Our future operations are highly dependent on a combination of factors, including (i) the timely and successful completion of additional financing discussed above, (ii) our ability to complete revenue-generating partnerships with pharmaceutical companies, (iii) the success of our research and development, (iv) the development of competitive therapies by other biotechnology and pharmaceutical companies, and, ultimately, (v) regulatory approval and market acceptance of our proposed future products.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2017 and 2016 (amounts in thousands):

	December 31,	
	2017	2016
Net cash (used in) provided by:		
Operating activities	\$(10,989)	\$(11,850)
Investing activities	1,812	(85)
Financing activities	5,534	16,500
Net (decrease) increase in cash and cash equivalents	<u>\$ (3,643)</u>	<u>\$ 4,565</u>

Operating Activities

Net cash used in operating activities of \$11.0 million during the year ended December 31, 2017 was primarily attributable to our net loss of \$23.8 million. This amount was offset by various non-cash charges of \$6.7 million, which was comprised of non-cash interest, stock-based compensation, losses on extinguishment of debt and payables, the fair value of shares issued in exchange for research and development services and Merger related charges, among others. The net change in our operating assets and liabilities of \$6.0 million is primarily attributable to the \$8.4 million increase in our accounts payable as we extend payables until we receive additional financing to be able to meet our obligations when they become due, offset by a \$2.4 million decrease in accrued expenses.

Net cash used in operating activities was \$11.8 million for the year ended December 31, 2016, which was primarily attributable to our net loss of \$17.7 million. After adjusting for non-cash charges of \$4.5 million, the changes in our working capital requirements reflect increases our research and development spend as we prepared for and advanced our product candidate for its clinical trials and a \$1.2 million increase in cash paid to our employees and outsourced consultants

Investing Activities

Net cash provided by investing activities was \$1.8 million for the year ended December 31, 2017 which was acquired, as a result of the Merger. Net cash used in investing activities was \$0.1 million for the year ended December 31, 2016, as a result of cash collateral held with a mid-sized financial institution to support credit card payables.

Financing Activities

Net cash provided by financing activities was \$5.5 million for the year ended December 31, 2017 as compared to \$16.5 million for the year ended December 31, 2016. In 2017, net cash provided by financing activities reflects proceeds from the sale of shares by Private SELLAS prior to the Merger, offset by partial repayment notes that did not convert to Private SELLAS shares in the financing. In 2016, net cash provided by financing activities reflects proceeds from the sale of convertible notes.

Description of Indebtedness

JGB Debenture

In May 2016, our predecessor company, Galena entered into a securities purchase agreement, with JGB pursuant to which Galena sold to JGB, at a 6.375% original issue discount, a \$25.5 million senior secured debenture and warrants to purchase up to 3,333 of the pre-Merger company's common stock. The senior secured debenture remains outstanding through the Merger.

The senior secured debenture matures on November 10, 2018 and accrues interest at 9% per year. In addition, on the maturity date of the senior secured debenture (or such earlier date that the principal amount of the senior secured debenture is paid in full by acceleration or otherwise) a fixed amount, which shall be deemed interest under the senior secured debenture, equal to \$0.8 million, will be due and payable to the holder of the senior secured debenture on such date in, at our option, cash and, subject to the same conditions for the payment of interest in shares of our common stock, or a combination of cash and our common stock. Our option to determine to pay the interest and principal in cash is only available if our cash on hand exceeds the outstanding principal by \$10.0 million. As of December 31, 2017 and the date of the issuance of our consolidated financial statements, we did not exceed the outstanding principal by \$10.0 million and therefore interest and principal are payable in shares of our common stock.

The outstanding principal and interest of the senior secured debenture that are payable in shares of our common stock at stock payment price of the lower of (a) 80% of the VWAP for the trading day immediately prior, and (b) 80% of the average of the three lowest VWAPs during the 20 consecutive trading day period immediately preceding; provided, however, to the extent that, on any given trading day, the price per share of our common stock on such trading day on the principal market equals or exceeds 115% of our common stock payment price, then for the such trading day only, each reference to 80% shall be deemed, for such trading day only, to be 92.5%. The redemptions for outstanding principal are at the option of the holder.

[Table of Contents](#)

Contractual Obligations

As of December 31, 2017, we had the following contractual commitments:

Contractual Obligations	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease (1)	\$298,800	\$ 222,800	\$ 76,000	\$ —	\$ —

(1) Operating lease obligations reflect our obligation to make payments in connection with our corporate headquarters in New York, NY.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and do not currently have any off-balance sheet arrangements, as defined in the rules and regulations of the SEC, other than operating leases.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles. The preparation of our consolidated financial statements and related disclosures requires our management to make estimates and judgments that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reported period. We base such estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions.

While our significant accounting policies are described in more detail in the notes to our audited consolidated financial statements appearing elsewhere in this annual report on Form 10-K, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Valuation of Intangible Assets

In conjunction with our Merger, we have recorded intangible assets related to in-process research and development, or IPR&D. We had total intangible assets of \$17.6 million as of December 31, 2017. We had no recorded intangible assets as of December 31, 2016.

The identifiable intangible assets are measured at their respective fair values as of the acquisition date and may be subject to revision within the measurement period, which may be up to one year from the acquisition date. The models used in valuing these intangible assets require the use of significant estimates and assumptions including but not limited to:

- estimates of revenues and operating profits related to the products or product candidates;
- the probability of success for unapproved product candidates considering their stages of development;
- the time and resources needed to complete the development and approval of product candidates;
- the life of the potential commercialized products and associated risks, including the inherent difficulties and uncertainties in developing a product candidate such as obtaining FDA and other regulatory approvals; and
- risks related to the viability of and potential alternative treatments in any future target markets.

We believe the fair values used to record intangible assets acquired in connection with a business combination using information known and knowable and are based upon reasonable estimates and assumptions given the facts and circumstances as of the related valuation dates.

Intangible assets related to IPR&D are considered to be indefinite-lived until the completion or abandonment of the associated R&D efforts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives at that point in time. During the period the assets are considered indefinite-lived, they are not amortized but are tested for impairment on an annual basis as well as between annual tests if we become aware of any events or changes that would indicate that it is more likely than not that the fair value of the IPR&D is below their respective carrying amounts. The fair value of our indefinite-lived intangible assets is dependent on assumptions such as the expected timing or probability of achieving the specified milestones, changes in projected revenues or changes in discount rates. Significant judgment is employed in determining these assumptions and changes to our assumptions could have a significant impact on our results of operations in any given period.

Intangible assets with finite useful lives are reviewed for impairment when facts or circumstances suggest that the carrying value of these assets may not be recoverable.

On December 29, 2017, in connection with consummation of the Merger with Galena, we acquired intangible assets related to IPR&D for NeuVax, GALE-401, and GALE-301 & Gale-302, which had an estimated aggregate fair value of \$17.6 Million. See Note 5, Goodwill and Intangible Assets of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

Goodwill

Goodwill is the excess of the cost of an acquired entity over the net amounts assigned to tangible and intangible assets acquired and liabilities assumed. Goodwill is not amortized but is subject to an annual impairment test. We have a single reporting unit and all goodwill relates to that reporting unit.

We perform our annual goodwill impairment test at the reporting unit level on October 1 of each fiscal year or more frequently if changes in circumstances or the occurrence of events suggest that an impairment exists. Goodwill is evaluated for impairment using the simplified test of goodwill impairment as defined by the FASB Accounting Standards Update No. 2017-04. Under the new guidance, goodwill impairment will be measured by the amount by which the carrying value of a reporting unit exceeds its fair value, without exceeding the carrying amount of goodwill allocated to that reporting unit. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded to the extent that the implied fair value of the reporting unit's goodwill is less than the carrying value of the reporting unit's goodwill. We did not recognize any impairment of goodwill during the year ended December 31, 2017.

Accrued Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers require advance payments; however, some invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of the estimates with the service providers and makes adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- vendors in connection with preclinical development activities;
- the production of preclinical and clinical trial materials;
- CROs in connection with clinical trials; and investigative sites in connection with clinical trials.

We base our expenses related to preclinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple research institutions and CROs that conduct and manage preclinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or prepaid accordingly. Although we do not expect its estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, we have not made any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

We account for stock-based compensation by estimating the fair value of each stock option on the date of grant using the Black-Scholes model. We recognize stock-based compensation expense on a straight line basis over the vesting term. We account for stock-options issued to non-employees by valuing the award using the Black-Scholes model and re-measuring such awards to the current fair value until the awards are vested or a performance commitment has otherwise been reached. Because the fair market value of options granted to non-employees is subject to change in the future, the amount of the future compensation expense will include fair value re-measurements until the stock options are fully vested.

The Black-Scholes model requires us to make certain assumptions regarding: (i) the expected volatility in the market price of our shares; (ii) dividend yield; (iii) risk-free interest rates; and (iv) the period of time employees are expected to hold the award prior to exercise (referred to as the expected holding period). As a result, if we revise our assumptions and estimates, our stock-based compensation expense could change.

Given our limited history as a publicly traded company following the Merger on December 29, 2017, we did not have sufficient trading data to calculate volatility based on our own common stock, and the expected volatility was calculated as of each grant date based on a peer group of publicly traded companies. The expected term of the stock options was determined based upon the simplified approach for employees, allowed under SEC Staff Accounting Bulletin No. 110, which assumes that the stock options will be exercised evenly from vesting to expiration. As data associated with future exercises is obtained, the expected term of future grants will be adjusted accordingly. For non-employee awards, we use the remaining contractual term.

[Table of Contents](#)

We measure compensation for RSUs based on the price of our shares at the grant date and we recognize the expense on a straight line basis over the vesting period. The expense relating to RSUs that contain both a service and a performance condition is estimated and adjusted on a quarterly basis based upon our assessment of the probability that the performance condition would be met. As a result, if we revise such assessment, our stock-based compensation expense could change.

Recent Accounting Pronouncements

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. The first part of this update addresses the complexity of accounting for certain financial instruments with down round features and the second part addresses the complexity of distinguishing liabilities from equity. The guidance is applicable to public business entities for fiscal years beginning after December 15, 2018 and interim periods within those years. We are currently evaluating the potential impact of the adoption of this standard on our consolidated results of operations, financial position and cash flows and related disclosures.

In May 2017, the FASB issued Accounting Standard Update No. 2017-09, *Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards are the same immediately before and after the modification. The guidance is applicable to public business entities for fiscal years beginning after December 15, 2017 and interim periods within those years. Early adoption is permitted, including adoption in any interim period. We do not expect this new guidance to have a material impact on our consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Restricted cash*, amending the presentation of restricted cash within the statement of cash flows. The new guidance requires that restricted cash be included within cash and cash equivalents on the statement of cash flows. The ASU is effective retrospectively for reporting periods beginning after December 15, 2017, with early adoption permitted. We are currently evaluating the impact of our pending adoption of the new standard on the consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update 2016-09, *Compensation-Stock Compensation*. ASU 2016-09 includes several areas of simplification to stock compensation including simplifications to the accounting for income taxes, classification of excess tax benefits on the Statement of Cash Flows and forfeitures. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016. An entity that elects early adoption must adopt all of the amendments in the same period. We adopted this ASU on January 1, 2017. There was no impact to our consolidated financial statements upon adoption.

[Table of Contents](#)

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases*, which establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. We are currently evaluating the impact of our pending adoption of the new standard on the consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The primary objective of our investment activities is to preserve capital. We do not utilize hedging contracts or similar instruments.

We are exposed to certain market risks relating primarily to (1) interest rate risk on our cash and cash equivalents and (2) risks relating to the financial viability of the institutions which hold our capital and through which we have invested our funds. We manage such risks by investing primarily in money market mutual funds.

In addition, we are exposed to foreign currency exchange rate fluctuations relating to payments we make to certain vendors and suppliers and license partners using foreign currencies. We do not hedge against foreign currency risks. Consequently, changes in exchange rates could adversely affect our operating results and stock price. Such losses have not been significant to date.

[Table of Contents](#)

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

SELLAS LIFE SCIENCES GROUP, INC.
FORM 10-K — FISCAL YEAR ENDED DECEMBER 31, 2017
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page No.</u>
Reports of Independent Registered Public Accounting Firms	103
Consolidated Balance Sheets as of December 31, 2017 and 2016	105
Consolidated Statements of Operations for the years ended December 31, 2017 and 2016	106
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017 and 2016	107
Consolidated Statements of Cash Flows for the years ended December 31, 2017 and 2016	108
Notes to Consolidated Financial Statements	109

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
SELLAS Life Sciences Group, Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of SELLAS Life Sciences Group, Inc. (the “Company”) as of December 31, 2017, the related consolidated statements of operations, stockholders’ equity (deficit) and cash flows for the year then ended. In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017, and the consolidated results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

As described in Note 1, the total and per share common stock information included in the Company’s 2016 consolidated financial statements has been retroactively adjusted to give effect to the reverse merger and stock split. The Company also revised its 2016 consolidated financial statements to present net loss per share. We audited the adjustments that were applied to the total and per share common stock information to give effect to the reverse merger, stock split and the presentation of net loss per share reflected in the 2016 financial statements. In our opinion, such adjustments are appropriate and have been properly applied. However, we were not engaged to audit, review, or apply any procedures to the 2016 consolidated financial statements of the Company other than with respect to such adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2016 consolidated financial statements taken as a whole.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Moss Adams LLP

San Francisco, California
April 13, 2018

We have served as the Company’s auditor since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of
SELLAS Life Sciences Group Ltd

We have audited, before the effects of the retrospective changes resulting from the acquisition described in Note 1, and the addition of net loss per share information to the consolidated financial statements as described in Note 3, the accompanying consolidated balance sheet of SELLAS Life Sciences Group Ltd and subsidiaries as of December 31, 2016, and the related consolidated statements of operations, changes in shareholders' deficit, and cash flows for the year then ended. The 2016 financial statements before the effects of the retrospective changes discussed in Note 1, and the addition of net loss per share information to the consolidated financial statements as described in Note 3, are not presented herein. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above, before the effects of the retrospective changes resulting from the acquisition described in Note 1 and the addition of net loss per share information to the consolidated financial statements as described in Note 3, present fairly, in all material respects, the financial position of SELLAS Life Sciences Group Ltd and subsidiaries as of December 31, 2016, and the results of their operations and their cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

We were not engaged to audit, review, or apply any procedures to the retrospective changes resulting from the acquisition described in Note 1, nor the net loss per share information added to the consolidated financial statements as described in Note 3 and, accordingly, we do not express an opinion or any other form of assurance about whether such retrospective changes, net loss per share information are appropriate and have been properly applied. Those retrospective changes were audited by a successor auditor.

The accompanying consolidated financial statements as of December 31, 2016 and for the year then ended have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring net losses since its inception that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ KPMG Audit Limited

Chartered Professional Accountants
Hamilton, Bermuda
September 22, 2017

SELLAS LIFE SCIENCES GROUP, INC.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except share and per share data)

	Year ended December 31,	
	2017	2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 2,319	\$ 5,962
Restricted cash and cash equivalents	10,431	85
Prepaid expenses and other current assets	337	332
Total current assets	13,087	6,379
Intangible assets	17,600	—
Goodwill	1,914	—
Deposits and other assets	925	41
Total assets	<u>\$ 33,526</u>	<u>\$ 6,420</u>
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Current portion of long-term debt	\$ 8,377	\$ —
Current portion of convertible debt	—	1,709
Accounts payable	11,691	—
Accrued expenses and other current liabilities	3,201	4,049
Litigation settlement payable	1,300	—
Total current liabilities	24,569	5,758
Deferred tax liability	1,673	—
Warrant liability	1,309	—
Contingent purchase price consideration	1,294	—
Long-term debt, net of current portion	2,611	—
Convertible debt, net of current portion	—	5,659
Total liabilities	<u>31,456</u>	<u>11,417</u>
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, \$0.0001 par value; 5,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$0.0001 par value; 350,000,000 shares authorized, 5,766,891 shares issued and outstanding at December 31, 2017; 1,268,489 shares issued and outstanding at December 31, 2016	1	—
Additional paid-in capital	56,254	25,434
Accumulated deficit	(54,185)	(30,431)
Total stockholders' equity (deficit)	2,070	(4,997)
Total liabilities and stockholders' equity (deficit)	<u>\$ 33,526</u>	<u>\$ 6,420</u>

See accompanying notes to consolidated financial statements.

SELLAS LIFE SCIENCES GROUP, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except share and per share data)

	Year ended December 31,	
	2017	2016
Operating expenses:		
Research and development	\$ 6,067	\$ 11,395
General and administrative	15,089	4,593
Severance costs	1,883	—
Total operating expenses and loss from operations	<u>(23,039)</u>	<u>(15,988)</u>
Interest expense, net	462	1,166
Other expense	—	526
Income tax expense	253	1
Net loss	(23,754)	(17,681)
Deemed dividend on conversion of 2015 Sely Note	(675)	—
Loss attributable to common stockholders	<u>\$ (24,429)</u>	<u>\$ (17,681)</u>
Basic and diluted loss per share to common stockholders	\$ (10.44)	\$ (18.66)
Weighted-average common shares outstanding, basic and diluted	<u>2,340,368</u>	<u>947,401</u>

See accompanying notes to consolidated financial statements.

SELLAS LIFE SCIENCES GROUP, INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT)
(Amounts in thousands, except share amounts)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total
	Shares	Amount			
Balance at January 1, 2016	879,994	\$ —	\$ 488	\$ (12,750)	\$ (12,262)
Shares issued as partial consideration of MSK license fees	13,815	—	900	—	900
Shares issued pursuant to MSK license agreement	41,181	—	1,976	—	1,976
Shares issued in cancellation of Clarendon license agreement	7,700	—	502	—	502
Shares issued upon conversion of 2016 convertible term note	236,705	—	15,411	—	15,411
Shares issued in cancellation of long term debt	89,094	—	5,803	—	5,803
Stock-based compensation expense	—	—	354	—	354
Net loss	—	—	—	(17,681)	(17,681)
Balance at December 31, 2016	1,268,489	—	25,434	(30,431)	(4,997)
Shares issued in connection with amendments to MSK license	83,594	—	388	—	388
Shares issued upon conversion of 2015 Shareholder Notes and accrued interest	330,551	—	1,294	—	1,294
Sale of common shares to related parties	1,534,711	—	6,007	—	6,007
Shares issued in connection with settlement of related party payables	96,662	—	378	—	378
Shares issued upon the acceleration of restricted stock units	46,373	—	—	—	—
Shares issued upon cancellation of Equilibria restricted stock units	58,208	—	—	—	—
Shares issued in connection with acquisition of Galena	1,588,605	1	12,486	—	12,487
Fair value of assumed options issued in connection with acquisition of Galena	—	—	32	—	32
Shares and common stock warrants issued upon conversion of 2015 Sely Note and accrued interest to Equilibria	632,326	—	6,739	—	6,739
Deemed dividend associated with conversion of 2015 Sely Note and common stock warrant issuance to Equilibria	—	—	(675)	—	(675)
Shares issued to Equilibria for incentive fee payment in connection with the acquisition of Galena	119,672	—	941	—	941
Shares issued to MSK for anti-dilution provisions	7,700	—	61	—	61
Stock-based compensation expense	—	—	3,169	—	3,169
Net loss	—	—	—	(23,754)	(23,754)
Balance at December 31, 2017	<u>5,766,891</u>	<u>\$ 1</u>	<u>\$ 56,254</u>	<u>\$ (54,185)</u>	<u>\$ 2,070</u>

See accompanying notes to consolidated financial statements.

SELLAS LIFE SCIENCES GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Year ended December 31,	
	2017	2016
Cash flows from operating activities:		
Net loss	\$ (23,754)	\$ (17,681)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	—	3
Non-cash research and development expense	258	821
Non-cash interest	—	1,166
Stock-based compensation	3,169	354
Loss on extinguishment of debt	—	201
Fair value of shares issued in exchange for research and development	449	1,974
Fair value of shares issued for incentive fee to Equilibria	941	—
Deferred income taxes	—	(41)
Severance costs paid by Galena	1,883	—
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	73	(477)
Accounts payable	8,366	—
Accrued expenses and other current liabilities	(2,374)	1,830
Net cash used in operating activities	(10,989)	(11,850)
Cash flows from investing activities:		
Net cash acquired from acquisition of Galena	1,812	
Change in restricted cash	—	(85)
Net cash provided by (used in) investing activities	1,812	(85)
Cash flows from financing activities:		
Net proceeds from issuance of common stock	6,007	—
Net proceeds from issuance of convertible debt	—	15,000
Net proceeds from issuance of long-term debt	—	1,500
Principal payments on convertible debt	(473)	—
Net cash provided by financing activities	5,534	16,500
Net decrease (increase) in cash and cash equivalents	(3,643)	4,565
Cash and cash equivalents at the beginning of period	5,962	1,397
Cash and cash equivalents at end of period	<u>\$ 2,319</u>	<u>\$ 5,962</u>
Supplemental disclosure of non-cash investing and financing activities:		
Shares issued in connection with acquisition of Galena	\$ 12,487	\$ —
Fair value of options assumed in connection with acquisition of Galena	\$ 32	\$ —
Related party payable settled in shares	\$ 228	\$ —
MSK payable settled in shares	\$ 150	\$ —
Shares issued upon conversion of 2015 Shareholder Notes and accrued interest	\$ 1,294	\$ —
Shares issued upon conversion of 2015 Sely Note and accrued interest to Equilibria	\$ 6,064	\$ —
Deemed dividend associated with conversion of 2015 Sely Note and common stock warrant issuance to Equilibria	\$ 675	\$ —

**SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

1. Organization and Description of Business

Merger of Galena Biopharma, Inc. and SELLAS Life Sciences Group Ltd.

As used in this annual report on Form 10-K, the words the “Company,” and “SELLAS” refer to SELLAS Life Sciences Group, Inc. and its consolidated subsidiaries following completion of the Merger. Said references before the completion of the Merger refer to Private SELLAS.

On December 29, 2017, Galena Biopharma, Inc. (“Galena”) completed the business combination with the privately held Bermuda exempted company, Sellas Life Sciences Group Ltd. (“Private SELLAS”), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of August 7, 2017 and amended November 5, 2017 the (“Merger Agreement”), by and among the Company, Sellas Intermediate Holdings I, Inc., Sellas Intermediate Holdings II, Inc., Galena Bermuda Merger Sub, Ltd., and Private SELLAS. The Company refers to this business combination throughout this annual report on Form 10-K as the Merger. As a result of the Merger, the Company’s business is now substantially comprised of the business of Private SELLAS, and although the Company is considered the legal acquiror of Private SELLAS, for accounting purposes, Private SELLAS is considered to have acquired the Company in the Merger. Consequently, the Merger is accounted for as a reverse acquisition.

Immediately prior to the Merger, the Galena effected a 1-for-30 reverse stock split of the Company’s outstanding common stock. Under the terms of the Merger Agreement, the Galena issued shares of the its common stock to Private SELLAS’ securityholders at an exchange ratio of 43.9972 shares of the its common stock in exchange for each common share of Private SELLAS outstanding immediately prior to the Merger. The Company also assumed all of the restricted stock units (“RSU”) issued and outstanding under the Private SELLAS Stock Incentive Plan #1, and all of the issued and outstanding warrants of Private SELLAS. Accordingly, such RSUs will now be settled in, and such warrants now are exercisable for, shares of the Company’s common stock. Accordingly, immediately after the Merger, there were approximately 5,766,891 shares of the Company’s common stock outstanding, with the former Private SELLAS securityholders owning approximately 67.5% of the Company’s fully diluted common stock, and the Company’s pre-Merger securityholders owning the remaining approximately 32.5%. The number of shares and per share amounts of common stock in the accompanying financial statements and notes to the consolidated financial statements have been restated to give retroactive effect to the common stock conversion ratio and reverse stock split for all periods presented, including common stock options, restricted stock units, and common stock warrants. The prior year amounts for outstanding common stock at the \$10.00 par value of Private SELLAS’ common stock and related additional paid-in capital have been retroactively presented at a \$0.0001 par value. These reclassifications had no effect on total equity, or net loss per share.

Common stock as included in the consolidated statement of stockholders’ equity (deficit) was adjusted to reflect the \$0.0001 par value per share and additional paid-in capital was adjusted as follows (in thousands):

	<u>2016</u>	<u>Retroactive Effect</u>	<u>2016 Revised</u>
Balance at January 1, 2016	\$ 288	\$ 200	\$ 488
Shares issued as partial consideration of MSK license fees	897	3	900
Shares issued pursuant to MSK license agreement	1,967	9	1,976
Shares issued in cancellation of Clarendon license agreement	500	2	502
Shares issued upon conversion of 2016 convertible note	15,357	54	15,411
Shares issued in cancellation of long-term debt	5,783	20	5,803
Stock-based compensation	354	—	354
Balance at December 31, 2016	<u>\$25,146</u>	<u>\$ 288</u>	<u>\$ 25,434</u>

Upon completion of the Merger, the Company changed the Company’s name from “Galena Biopharma, Inc.” to “SELLAS Life Sciences Group, Inc.”, the Company’s common stock began trading on The Nasdaq Capital Market under a new ticker symbol “SLS” on January 2, 2018 and the Company’s financial statements became those of Private SELLAS.

Overview

The Company is a clinical-stage biopharmaceutical company focused on novel cancer immunotherapeutics for a broad range of cancer indications. The Company’s lead product candidate, galinpepimut-S (“GPS”), is a cancer immunotherapeutic agent licensed from Memorial Sloan Kettering Cancer Center (“MSK”), that targets the Wilms tumor 1 (“WT1”), protein, which is present in 20 or more cancer types. Based on its mechanism of action as a directly immunizing agent, GPS has the potential as a monotherapy or in combination with other immunotherapeutic agents to address a broad spectrum of hematologic, or blood, cancers and solid tumor indications. Phase 2 clinical trials for GPS have been completed and the Company’s planned Phase 3 clinical trials (pending funding availability) for two indications, acute myeloid leukemia (“AML”), and malignant pleural mesothelioma (“MPM”). GPS is also in development as a potential treatment for multiple myeloma (“MM”), and ovarian cancer. The Company plans to study GPS in up to four additional indications: as a combination therapy in small cell lung cancer, colorectal cancer, triple-negative breast cancer; and, as a monotherapy in chronic myelogenous leukemia (“CML”). The Company received Orphan Drug Product Designations from the U.S. Food and Drug Administration (“FDA”) as well as Orphan Medicinal Product Designations from the European Medicines Agency (“EMA”), for GPS in AML and MPM, as well as Fast Track designation for AML and MPM from the FDA.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Company's pipeline also includes the legacy development programs of the pre-Merger company Galena, including novel cancer immunotherapy programs for NeuVax™ (nelipepimut-S; a vaccine against the E75 peptide derived from the human epidermal growth factor 2 -or HER2- protein), GALE-301 (a vaccine against the E39 peptide derived from the folate binding protein ("FBP")) and GALE-302 (a vaccine against the J65 peptide derived from FBP) and GALE-401 (a controlled release version of the approved drug anagrelide). NeuVax is currently in multiple investigator-sponsored Phase 2 clinical trials in breast cancer. GALE-301 and GALE-302 have completed early stage trials in ovarian, endometrial and breast cancers. GALE-401 is being developed for the treatment of elevated platelets in patients with myeloproliferative neoplasms ("MPNs"), and a completed Phase 2 clinical trial in patients with essential thrombocythemia ("ET") for this clinical candidate. Since the closing of the Merger, management has been evaluating, GALE-301, GALE-302, and GALE-401 for potential internal development, strategic partnership, or other types of product rationalizations.

2. Liquidity

The Company has not generated any revenues from product sales and has funded operations primarily from the proceeds of private placements of its equity interests (prior to the Merger) and convertible notes, as well as through the Merger. Substantial additional financing will be required by the Company to continue to fund its research and development activities. No assurance can be given that any such financing will be available when needed or that the Company's research and development efforts will be successful.

The Company regularly explores alternative means of financing its operations and seeks funding through various sources, including public and private securities offerings, collaborative arrangements with third parties and other strategic alliances and business transactions. On March 7, 2018, the Company entered into a definitive securities purchase agreement to issue shares of its convertible preferred stock ("Series A Convertible Preferred") and warrants to purchase shares of its common stock in a private placement transaction to a select group of institutional investors. The Series A Convertible Preferred is expected to close in two tranches and result in aggregate gross proceeds to the Company of approximately \$10.7 million. The Company closed the first tranche for approximately \$6.0 million on March 9, 2018. The remaining \$4.7 million will be received at the second closing, which is subject to stockholder approval, and is expected to occur early in the second quarter.

In addition to the proceeds from the Series A Convertible Preferred, in the first quarter of 2018, JGB (Cayman) Newton Ltd ("JGB") the holder the Company's senior secured debenture due November 2018 redeemed \$2.6 million of outstanding principal that was satisfied by the Company with 635,894 shares of the Company's common stock and redeemed \$0.6 million of outstanding principal, which the Company satisfied in cash. As a result of the redemptions, the Company was able to transfer \$3.2 million out of restricted cash and cash equivalents and into unrestricted cash and cash equivalents to be used to fund the Company's ongoing operations. The outstanding principal balance on the senior secured debenture as of April 6, 2018 is \$7.0 million and is maintained by the Company as restricted cash.

Other than as described in Note 15, the Company currently does not have any commitments to obtain additional funds and may be unable to obtain sufficient funding in the future on acceptable terms, if at all. If the Company cannot obtain the necessary funding, it will need to delay, scale back or eliminate some or all of its research and development programs or enter into collaborations with third parties to: commercialize potential products or technologies that it might otherwise seek to develop or commercialize independently; consider other various strategic alternatives, including a merger or sale of the Company; or cease operations. If the Company engages in collaborations, it may receive lower consideration upon commercialization of such products than if it had not entered into such arrangements or if it entered into such arrangements at later stages in the product development process.

The Company has prepared its financial statements assuming that it will continue as a going concern, which contemplates realization of assets and the satisfaction of liabilities in the normal course of business. The Company has incurred net losses since inception and it expects to generate losses from operations for the foreseeable future primarily due to research and development costs for its potential product candidates, which raises substantial doubt about the Company's ability to continue as a going concern. Various internal and external factors will affect whether and when the Company's product candidates become approved drugs and how significant their market share will be, some of which are outside of the Company's control. The length of time and cost of developing and commercializing these product candidates and/or failure of them at any stage of the drug approval process will materially affect the Company's financial condition and future operations. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

As of December 31, 2017, the Company had a cash balance of approximately \$2.3 million and restricted cash at \$10.4 million. In addition, the Company had outstanding accounts payable and accrued expenses of \$14.9 million and indebtedness of \$11.0 million as of December 31, 2017, which consists of the Company's senior secured debenture with JGB. The Company expects its existing cash as of December 31, 2017, together with the proceeds from the initial closing of its Series A Convertible Preferred in March 2018, will enable the Company to fund its operating expenses and capital expenditure requirements through June 2018. Assuming that all conditions to the initial closing are met, the Company expects an additional \$4.7 million of cash proceeds from the second closing of the sale of the Company's Series A Convertible Preferred and warrants in the second quarter of 2018.

3. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to U.S. GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries, SELLAS Bermuda, SELLAS Life Sciences Group UK Ltd ("SELLAS UK"), Aphera, Inc. ("Aphera") and Mills Pharmaceuticals, LLC ("Mills"). All significant intercompany accounts and transactions have been eliminated upon consolidation.

Use of Estimates

The preparation of these consolidated financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period.

On an ongoing basis, the Company evaluates its estimates using historical experience and other factors, including the current economic environment. Significant items subject to such estimates are assumptions used for purposes of determining stock-based compensation, the fair value of the warrants, beneficial conversion features associated with convertible notes, fair value of intangible assets acquired, carrying value of goodwill, fair value of contingent purchase price consideration, fair value of deferred tax liability assumed and accounting for research and development activities. Management believes its estimates to be reasonable under the circumstances. Actual results could differ significantly from those estimates.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, including cash equivalents, accounts payable, and accrued expenses approximate fair value due to the short-term nature of those instruments. The carrying amounts of the Company's outstanding convertible notes approximate fair value due to the debt carrying a variable interest rate that is tied to the current London Interbank Offer Rate ("LIBOR") rate. The fair value of the convertible notes is determined using a binomial lattice model that utilizes certain unobservable inputs that fall within Level 3 of the fair value hierarchy. The fair value of the warrants is determined using a Black-Scholes pricing model.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash on deposit with multiple financial institutions, the balances of which frequently exceed federally insured limits.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

Cash and Cash Equivalents

The Company considers any highly liquid investments, such as money market funds, with an original maturity of three months or less to be cash and cash equivalents.

Restricted Cash and Cash Equivalents

Restricted cash consists of the minimum cash covenant as required by the debenture and certificates of deposit on hand with the Company's financial institutions as collateral for its corporate credit cards.

Intangible Assets

Intangible assets are comprised of identifiable in-process research and development ("IPR&D") assets and are considered indefinite-lived intangible assets and are assessed for impairment annually on October 1 or more frequently if impairment indicators exist. If the associated research and development effort is abandoned, the related assets will be written-off and the Company will record a non-cash impairment loss. For those compounds that reach commercialization, the IPR&D assets will be amortized over their estimated useful lives.

Goodwill

Goodwill is the excess of the cost of an acquired entity over the net amounts assigned to tangible and intangible assets acquired and liabilities assumed. Goodwill is not amortized but is subject to an annual impairment test. The Company has a single reporting unit and all goodwill relates to that reporting unit.

The Company performs its annual goodwill impairment test at the reporting unit level on October 1 of each fiscal year or more frequently if changes in circumstances or the occurrence of events suggest that an impairment exists. Goodwill is evaluated for impairment using the simplified test of goodwill impairment as defined by the FASB Accounting Standards Update No. 2017-04. Under the new guidance, goodwill impairment will be measured by the amount by which the carrying value of a reporting unit exceeds its fair value, without exceeding the carrying amount of goodwill allocated to that reporting unit. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded to the extent that the implied fair value of the reporting unit's goodwill is less than the carrying value of the reporting unit's goodwill. The Company did not recognize any impairment of goodwill during the year ended December 31, 2017.

Severance Costs

The Company recognized and paid \$1.9 million of exit costs during 2017 related to severance benefits for former Galena employees terminated immediately prior to the consummation of the Merger.

Patents and Patent Application Costs

Although the Company believes that its patents and underlying technology have continuing value, the amount of future benefits to be derived from the patents is uncertain. Patent costs are, therefore, expensed as incurred.

Legal Fees and Insurance Recoveries

There can be a significant time lag between the time that legal fees are incurred and the insurance reimbursement available to offset the related costs. The legal fees are recorded in the period they are incurred, and the insurance recoveries for those costs are recorded in the period when the insurance reimbursement is deemed probable.

Stock-based Compensation

The Company follows the provisions of the FASB ASC Topic 718, "Compensation — Stock Compensation" ("ASC 718"), which requires the measurement and recognition of compensation expense for all stock-based payment awards made to employees, non-employee directors, and consultants, including stock options and warrants. Stock compensation expense based on the grant date fair value estimated in accordance with the provisions of ASC 718 is recognized as an expense over the requisite service period.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

For stock options and warrants granted as consideration for services rendered by non-employees, the Company recognizes compensation expense in accordance with the requirements of FASB ASC Topic 505-50 (“ASC 505-50”), “*Equity Based Payments to Non-Employees*.” Non-employee option and warrant grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to vesting, the value of these options and warrants, as calculated using the Black-Scholes option-pricing model, will be re-measured using the fair value of the Company’s common stock and the non-cash compensation recognized during the period will be adjusted accordingly. Since the fair market value of options and warrants granted to non-employees is subject to change in the future, the amount of the future compensation expense will include fair value re-measurements until the stock options are fully vested.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development costs that are paid in advance of performance are capitalized as a prepaid expense and amortized over the service period as the services are provided. Clinical study costs, a component of research and development expenses, are accrued over the service periods specified in the contracts and adjusted as necessary based on an ongoing review of the level of effort and costs actually incurred. Payments for a product license prior to regulatory approval of the product and payments for milestones achieved prior to regulatory approval of the product are expensed in the period incurred as research and development expenses. Milestone payments made in connection with regulatory approvals are capitalized and amortized to cost of revenue over the remaining useful life of the asset.

Research and development expenses primarily consist of the intellectual property and research and development materials acquired, expenses from third parties who conduct research and development activities on behalf of the Company as well as related wages, benefits and other operating costs. The Company expenses in-process research and development projects acquired as asset acquisitions which have not reached technological feasibility and which have no alternative future use.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. The Company recognizes the benefit of an uncertain tax position that it has taken or expects to take on its income tax return it files, if such a position is more likely than not to be sustained.

The Company recognizes liabilities or assets for the deferred tax consequences of temporary differences between the tax basis of assets or liabilities and their reported amounts in the financial statements in accordance with FASB ASC 740-10, “*Accounting for Income Taxes*” (“ASC 740-10”). These temporary differences will result in taxable or deductible amounts in future years when the reported amounts of the assets or liabilities are recovered or settled. ASC 740-10 requires that a valuation allowance be established when management determines that it is more likely than not that all or a portion of a deferred asset will not be realized. The Company evaluates the realizability of its net deferred income tax assets and valuation allowances as necessary, at least on an annual basis. During this evaluation, the Company reviews its forecasts of income in conjunction with other positive and negative evidence surrounding the realizability of its deferred income tax assets to determine if a valuation allowance is required. Adjustments to the valuation allowance will increase or decrease the Company’s income tax provision or benefit. The recognition and measurement of benefits related to the company’s tax positions requires significant judgment, as uncertainties often exist with respect to new laws, new interpretations of existing laws, and rulings by taxing authorities. Differences between actual results and the Company’s assumptions or changes in the Company’s assumptions in future periods are recorded in the period they become known.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

On December 22, 2017 the President of the United States signed into law the Tax Cuts and Jobs Act (“The 2017 Tax Act”). This legislation makes significant changes in the United States tax laws including, but not limited to, reducing the corporate tax rate to 21% starting in 2018. The 2017 Tax Act required the Company to revalue its deferred tax assets and liabilities to the new rate of 21%. For the years ended December 31, 2017 and 2016, the Company recognized income tax expense of \$253,000 and \$1,000, respectively. Staff Accounting Bulletin No. 118 (“SAB 118”) was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. In accordance with SAB 118, we determined that the adjustment to deferred taxes was a provisional amount and a reasonable estimate at December 31, 2017. We do not expect any impact on recorded deferred tax balances as the remeasurement of net deferred tax assets will be offset by a change in valuation allowance. We are analyzing certain aspects of the Tax Act which could potentially affect the remeasurement of the net deferred tax assets.

Net Loss Per Share

Basic loss per share is computed by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during each period. Diluted loss per share includes the effect, if any, from the potential exercise or conversion of securities, such as convertible debt, warrants, stock options and unvested restricted stock that would result in the issuance of incremental shares of common stock. In computing the basic and diluted net loss per share, the weighted average number of shares remains the same for both calculations due to the fact that when a net loss exists, dilutive shares are not included in the calculation as the impact is anti-dilutive.

The following potentially dilutive securities outstanding have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	<u>Year ended December 31,</u>	
	<u>2017</u>	<u>2016</u>
Common stock warrants	963	—
Stock options	10	55
Unvested restricted stock awards	13	67
	<u>986</u>	<u>122</u>

Amounts in the table reflect the common stock equivalents of the noted instruments.

Comprehensive Loss

The Company has no items of comprehensive income or loss other than net loss.

Recently Issued Accounting Pronouncements

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. The first part of this update addresses the complexity of accounting for certain financial instruments with down round features and the second part addresses the complexity of distinguishing liabilities from equity. The guidance is applicable to public business entities for fiscal years beginning after December 15, 2018 and interim periods within those years. The Company is currently evaluating the potential impact of the adoption of this standard on its consolidated results of operations, financial position and cash flows and related disclosures.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

In May 2017, the FASB issued Accounting Standard Update No. 2017-09, *Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards are the same immediately before and after the modification. The guidance is applicable to public business entities for fiscal years beginning after December 15, 2017 and interim periods within those years. Early adoption is permitted, including adoption in any interim period. The Company does not expect this new guidance to have a material impact on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Restricted cash*, amending the presentation of restricted cash within the statement of cash flows. The new guidance requires that restricted cash be included within cash and cash equivalents on the statement of cash flows. The ASU is effective retrospectively for reporting periods beginning after December 15, 2017, with early adoption permitted. The Company is currently evaluating the impact of its pending adoption of the new standard on the consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update 2016-09, *Compensation-Stock Compensation*. ASU 2016-09 includes several areas of simplification to stock compensation including simplifications to the accounting for income taxes, classification of excess tax benefits on the Statement of Cash Flows and forfeitures. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016. An entity that elects early adoption must adopt all of the amendments in the same period. The Company adopted this ASU on January 1, 2017. There was no impact to the Company's consolidated financial statements upon adoption.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases*, which establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the impact of its pending adoption of the new standard on the consolidated financial statements.

4. Business Combination

On December 29, 2017, the Company completed the Merger with Private SELLAS as discussed in Note 1. The Merger was accounted for as reverse merger under the acquisition method of accounting whereby Private SELLAS was considered to have acquired the Company for financial reporting purposes because, immediately upon completion of the Merger, Private SELLAS stockholders held a majority of the voting interest of the combined company. Immediately after the Merger, stockholders of Private SELLAS and the Company's common stock, warrants and options owned approximately 67.5% and 32.5% of the fully diluted common stock of the Company, respectively.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The purchase consideration in a reverse acquisition is determined with reference to the value of equity that the accounting acquirer, in this case, Private SELLAS, would have had to issue to the owners of the accounting acquiree, the Company, to give the pre-acquisition equity holders of the Company the same percentage interest in Private SELLAS that such pre-acquisition equity holders held in the Company immediately following the Merger. The purchase price was calculated as follows (in thousands):

Fair value of the Company's pre-Merger shares outstanding	\$12,487
Estimated fair value of the Company's per-Merger stock options outstanding	32
Total purchase price	<u>\$12,519</u>

The Merger transaction has been accounted for using the acquisition method of accounting, which requires that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date. See Note 5 for the valuation technique utilized to value the IPR&D.

The following table summarizes the allocation of the purchase price to the assets acquired and liabilities assumed as of the acquisition date (in thousands):

Assets acquired:	
Cash	\$ 1,812
Restricted cash	10,346
Prepaid expenses and other assets	3,103
Intangible assets	17,600
Goodwill	1,914
Total assets acquired	<u>\$34,775</u>
Liabilities assumed:	
Accounts payable and accrued expenses	\$ 5,692
Litigation settlement	1,300
Long-term debt	10,988
Contingent purchase price consideration of Aphera, Inc.	1,294
Warrant liability	1,309
Deferred tax liability	1,673
Total liabilities assumed	<u>\$22,256</u>
Net assets acquired	<u>\$12,519</u>

Qualitative factors supporting the recognition of goodwill due to the Merger include the Company's anticipated enhanced ability to secure additional capital and gain access to capital market opportunities as a public company. The goodwill is not deductible for income tax purposes.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The following summary pro forma consolidated financial information reflects the Merger as if it had occurred on January 1, 2016 for purposes of the statements of operations. This summary pro forma information is not necessarily representative of what the Company's results of operations would have been had the Merger in fact occurred on January 1, 2016, and is not intended to project the Company's results of operations for any future period. In addition, transaction costs associated with the Merger of \$5.7 million are included in general and administrative expense in the statement of operations for the year ended December 31, 2017.

Pro forma consolidated financial information for 2017 and 2016 (unaudited):

	<u>Year ended December 31,</u>	
	<u>2017</u>	<u>2016</u>
Net revenues (in thousands)	\$ —	\$ —
Net loss (in thousands)	\$ 24,089	\$ 28,389
Basic and diluted net loss per share	\$ 5.15	\$ 8.61

Non-recurring pro forma transaction costs directly attributable to the Merger were \$5.7 million for the year ended December 31, 2017 and have been deducted from the net loss presented above. The costs deducted from the year ended December 31, 2017 period included a success fee and other transaction costs of \$4.8 million and issued 119,672 shares of common stock with a fair value of \$0.9 million as a fee to Equilibria Capital Management Limited ("Equilibria"). Additionally, the Company incurred approximately \$1.9 million in severance costs as a result of resignations of executive officers immediately prior to the Merger. These costs are excluded from the pro forma financial information for the year ended December 31, 2017. The Company excluded a \$5.2 million impairment charge incurred by the Company as well as combined transaction costs from Galena and the Company in the amount of \$8.7 million from the pro forma financial information for the year ended December 31, 2017.

5. Goodwill and Intangible Assets

The Company completes its annual impairment test on October 1 each year, or more frequently if triggering events indicate a possible impairment. The Company continually evaluates financial performance, economic conditions and other relevant developments in assessing if an interim period impairment test is necessary.

Changes in the carrying amount of goodwill for the period ended December 31, 2017 consisted of the following (in thousands):

Balance as of January 1, 2017	\$ —
Goodwill as a result of the Merger	1,914
Balance as of December 31, 2017	<u>\$ 1,914</u>

Intangible assets consist of IPR&D acquired as part of the Merger. IPR&D assets represent research and development assets that have not yet reached commercialization. At December 31, 2017, the significant components of the Company's IPR&D assets consist of the NeuVax program for the prevention of recurrence in breast cancer, the GALE-401 program for treatment of essential thrombocythemia, and the GALE-301 & GALE-302 programs for prevention of cancer recurrent in ovarian and endometrial cancer patients in the adjuvant setting.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Company's allocation of purchase price to acquired IPR&D was \$17.6 million. The estimated fair value of the GALE-401 and NeuVax IPR&D assets were determined using a "income approach," which is a valuation technique that provides an estimate of the fair value of an asset based on market participant expectations of the cash flows an asset would generate over its remaining useful life. The fair values of the GALE-401 and NeuVax programs were \$9.1 million and \$5.7 million, respectively. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for the asset or product (including net revenues, cost of sales, research and development costs, selling and marketing costs and working capital/asset contributory asset charges), the appropriate discount rate to select in stream, the assessment of the asset's life cycle, the potential regulatory and commercial success risks, competitive trends impacting the asset cash flow stream as well as other factors. The fair value of the GALE-301 & GALE-302 programs was \$2.8 million as determined using the replacement cost approach given the Phase 1/2a development status of the programs and the lack of projected financial information.

IPR&D assets are required to be classified as indefinite-lived assets until the successful commercialization of the asset or the abandonment of the associated R&D effort. These assets are assessed for impairment annually on October 1 or more frequently if impairment indicators exist. Accordingly, during the development period after the date of acquisition, these assets will not be amortized until commercialization is reached. For those programs that reach commercialization, the Company will determine the useful life of the asset, reclassify the asset out of IPR&D and begin amortization. If the associated R&D effort is abandoned, the related IPR&D assets will likely be written-off, and the Company will record a non-cash impairment loss.

6. Collaboration and License Agreements

As part of its business, the Company enters into licensing agreements with third parties that often require milestone and royalty payments based on the progress of the licensed asset through development and commercial stages. Milestone payments may be required, for example, upon approval of the product for marketing by a regulatory agency, and the Company may be required to make royalty payments based upon a percentage of net sales of the product. The expenditures required under these arrangements in any period may be material and are likely to fluctuate from period to period.

These arrangements sometimes permit the Company to unilaterally terminate development of the product and thereby avoid future contingent payments; however, the Company is unlikely to cease development if the compound successfully achieves clinical testing objectives.

Memorial Sloan Kettering Cancer Center

On September 4, 2014, (the "MSK Effective Date") the Company entered into a license agreement (the "Original MSK License Agreement") with MSK under which the Company was granted an exclusive license to develop and commercialize MSK's WT1 peptide vaccine technology. Under the terms of the Original MSK License Agreement, the Company is required to obtain certain levels of financing. If such financing is not met, MSK will have the right to terminate the Original MSK License Agreement with prior written notice, unless the Company manages to overcome the shortfall during the term of the notice period.

As part of the consideration for the rights, privileges and licenses granted under the Original MSK License Agreement, the Company agreed to issue 13,199 shares to MSK representing 1.5% of the Company's fully diluted share capital as of the MSK Effective Date, which obligation was satisfied by assignment of 6,599 shares from each of the Company's Chief Executive Officer, co-founder and Vice Chairman of the Board, Dr. Angelos M. Stergiou (M.D., Sc.D. h.c), and the Company's other co-founder, Dr. Miltiadis Sougioultzoglou (M.D.), to MSK for which they received no consideration. Additionally, the Company was obligated to pay upfront license fees in an amount equal to \$1.3 million. The Company recognized this amount as research and development expense during the year ended December 31, 2014, as it had no alternative future use. The Company would further be obligated to pay minimum royalty payments in the amount of \$0.1 million each year commencing in 2015 and research funding costs of \$0.2 million in each year and for three years commencing in January 2015. In addition, to the extent certain development and commercial milestones are achieved, the Company will be required to pay MSK up to \$17.4 million in milestone payments for each licensed product, in addition to royalties in the event of commercial sales of any licensed products.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Original MSK License Agreement, unless terminated earlier in accordance with the terms of the Original MSK License Agreement, will continue on a country-by-country and licensed product-by-licensed product basis, until the later of: (a) expiration of the last valid claim embracing such licensed product; (b) expiration of any market exclusivity period granted by law with respect to such licensed product; or (c) ten (10) years from the first commercial sale in such country.

On October 30, 2015, the Company and MSK entered into the License Amendment, Waiver and Share Issuance Agreement (the “First MSK Amendment”). The First MSK Amendment extended the date required for the Company to obtain financing from August 1, 2015 to December 31, 2016, modified the amount of required financing and waived past non-compliance with certain related provisions of the Original MSK License Agreement. In exchange for the First MSK Amendment, the Company agreed to issue an aggregate of 10,867 shares to MSK, which represented 1% of the fully diluted share capital of the Company at such date. The First MSK Amendment added certain anti-dilution protection clauses and entitled MSK to issuance of additional shares to the extent the Company was not able to obtain the required financing.

On August 10, 2016, the Company and MSK entered into the Second License Amendment, Waiver and Agreement (the “Second MSK Amendment”). The Second MSK Amendment extended further the date required for the Company to obtain financing from December 31, 2016 to June 30, 2017, amended the anti-dilution provisions of the First MSK Amendment and waived past non-compliance with certain related provisions of the First MSK Amendment. Under the Second MSK Amendment, outstanding obligations of the Company to MSK in an amount of \$0.9 million were converted into 13,815 shares effective November 1, 2016 upon the Company’s re-domiciliation to Bermuda. In consideration for this amendment and pursuant to the anti-dilution provisions in the Original MSK License Agreement as amended by the First MSK Amendment and the Second MSK Amendment, the Company issued MSK 30,314 additional shares and incurred accordingly \$2.0 million of research and development expense, which reflected the fair value of the Company’s shares at such date.

For the year ended December 31, 2017, the Company incurred \$1.0 million of expenses relating to \$0.7 million of milestone payments, \$0.1 million of guaranteed minimum royal payments and \$0.2 million of research funding costs. For the year ended December 31, 2016 the Company incurred \$0.6 million of expenses relating to \$0.3 million of milestone payments, \$0.1 million of guaranteed minimum royal payments and \$0.2 million of research funding costs. Such expenses have been included in research and development costs. Further, under the Second MSK Amendment, the Company is obligated to pay MSK \$0.7 million in milestone payments in two equal installments, within 60 days following the initiation of its Phase 3 AML and mesothelioma clinical studies.

On May 25, 2017, the Company and MSK entered into an Amended and Restated Exclusive License Agreement (the “MSK A&R License Agreement”). Under the MSK A&R License Agreement, the Company expanded its license under the original MSK License Agreement, as amended, to include a license to commercially develop certain additional WT1 peptides through a program of exploiting certain patents and other rights covering such peptides.

The MSK A&R License Agreement, amongst others, added certain milestone payments for each additional patent licensed product as defined in the MSK A&R License Agreement, and amended the milestone payments due upon commencement of the Phase 3 AML and mesothelioma clinical trials from \$0.3 million to \$0.4 million. In consideration for the MSK A&R License Agreement, the Company issued 8,799 shares to MSK. Pursuant to a side letter to the MSK A&R License Agreement, dated May 25, 2017 (the “MSK Side Letter”), MSK converted the next milestone payment of \$0.2 million, which was due June 30, 2017, into shares. Further, in consideration for the MSK Side Letter, Dr. Angelos M. Stergiou (M.D., Sc.D. h.c.), the Company’s Chief Executive Officer, assigned 15,399 of his shares to MSK, for which Dr. Stergiou received no cash consideration.

On October 11, 2017, the Company and MSK entered into a second Amended and Restated Exclusive License Agreement (the “Second MSK A&R License Agreement”). Under the Second MSK A&R License Agreement, the Company and MSK extended the dates for the Company to have obtained necessary financing, and certain milestone dates, in exchange for increased milestone payments, clarification regarding MSK’s anti-dilution rights, and termination of the MSK Side Letter dated May 25, 2017. In connection with the MSK A&R License Agreement, the Company issued 74,795 shares to MSK. Prior to the Merger, the Company issued an additional 7,700 shares to MSK in connection with their anti-dilution rights.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

Merck & Co., Inc.

On September 21, 2017, the Company entered into a clinical trial collaboration and supply agreement through a Merck & Co., Inc. subsidiary, Merck Sharp & Dohme B.V. (“Merck subsidiary”), whereby the Company agreed with the Merck subsidiary to collaborate in a research program to evaluate GPS as it is administered in combination with Merck’s PD1 blocker pembrolizumab (Keytruda[®]) in a Phase 1/2 clinical trial enrolling patients in up to five cancer indications, including both hematologic malignancies and solid tumors.

The purpose of the clinical trials is to determine if the administration of GPS in combination with pembrolizumab has the potential to demonstrate clinical activity in the presence of macroscopic disease, where monotherapy with either agent would have a more limited effect. The rationale for the study is based upon the presumed immunobiologic and pharmacodynamic synergy between the two agents, whereby the negative influence of tumor microenvironment factors on the immune response is mitigated by PD1 inhibition (by pembrolizumab) thus allowing the patients’ own immune cells to invade and destroy cancerous growth deposits specifically sensitized against WT1 by GPS.

The Phase 1/2 clinical trial will utilize a combination of GPS plus pembrolizumab (Keytruda) in patients with WT1+ relapsed or refractory tumors. Specifically, the study is expected to explore the following cancer indications: colorectal (arm enriched in but not exclusive to patients with microsatellite instability-low), ovarian, small cell lung, triple-negative breast, and AML. This study will assess the efficacy and safety of the combination, comparing overall response rates and immune response markers achieved with the combination compared to prespecified rates based on those seen with pembrolizumab alone in comparable patient populations. The trial is anticipated to begin in the third quarter of 2018 (pending funding availability).

Advaxis, Inc.

On February 24, 2017, the Company and Advaxis, Inc. (“Advaxis”) entered into a research and development collaboration agreement, whereby both parties will collaborate in a research program to evaluate, through a “proof of principle” trial or trials (“PoP Clinical Trial”), a clinical candidate comprised of the combination of Advaxis’ proprietary *Lm*- based antigen delivery technology and the Company’s patented WT1 targeted heteroclitic peptide antigen mixture (GPS). The term of the Advaxis agreement will expire upon the earlier of: (a) completion of the PoP Clinical Trial, (b) a decision by the parties to cease further development of the clinical candidate and (c) early termination of the Advaxis agreement pursuant to the terms thereof.

The Advaxis agreement provides for cost-sharing between the parties, with Advaxis being responsible for the costs of performing the research activities and filing any investigational new drug application (“IND”), cost-sharing for preparation of the IND, and the Company being responsible for the costs (exclusive of product costs) of conducting the PoP trial. The Company also agreed to make certain non-refundable milestone payments to Advaxis having an aggregate amount of up to \$108.0 million, upon meeting certain clinical, regulatory and commercial milestones. In addition, if net sales exceed certain targets, the Company agreed to make non-refundable sales milestone payments up to \$250.0 million and royalty payments based on specific royalty rates, with a maximum rate capped at a percentage rate in the low double digits if net sales exceed \$1.0 billion.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

Trojantec Ltd.

On November 14, 2014, the Company entered into a license agreement with Trojantec Ltd., (“Trojantec”), a company incorporated in Cyprus, under which the Company was granted an exclusive license to develop and commercialize Trojantec’s TR1 Antenapedia/p21 protein treatment. In consideration for entering into the Trojantec License Agreement and for the rights, privileges and licenses granted, the Company incurred \$0.3 million of license fees during the year ended December 31, 2014. Under the license agreement, the Company would be obligated to pay Trojantec royalties on net sales, if any, and milestone payments related to the achievement of certain clinical and regulatory goals.

On July 14, 2015, the Company and Trojantec entered into the First Amended and Restated Exclusive License Agreement. The amendment reinstated the obligations of the Company under the original license agreement and further obligated the Company to pay project management fees of up to \$0.4 million.

On June 15, 2016, the Company entered into an agreement with Trojantec to terminate the license agreement. In consideration for the termination agreement, the Company incurred and paid in cash \$0.1 million of termination fees. Such fees were included in research and development expenses for the year ended December 31, 2016.

Clarendon Trading e Investimentos LDA

On January 18, 2016, the Company entered into a license arrangement with Clarendon Trading e Investimentos LDA (“Clarendon”), a company incorporated in Portugal. Under the license agreement, the Company was granted an exclusive license to know-how to use for development and to manufacture products involving therapeutic use of Clarendon’s intellectual property. In consideration for this assignment, the Company incurred expenses of EUR 0.5 million. Under the license agreement, in the event that the Company was successful in obtaining regulatory approval for any commercial exploitation of the therapeutic uses of Zolpidem, the Company would be obligated to pay Clarendon a yearly success fee and guaranteed minimum royalty payments.

Effective September 30, 2016, the Company entered into termination agreement with Clarendon to terminate the license agreement. In consideration for the termination agreement and in complete satisfaction of the Company’s outstanding liabilities, the Company agreed to pay Clarendon \$0.3 million in cash and issue Clarendon 7,700 shares. In extinguishment of the Company’s outstanding liabilities to Clarendon, the Company incurred an additional \$0.2 million of expense to reflect the fair value of the shares issued to Clarendon.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Company's predecessor company, Galena entered into the following licensing and/or supply agreements, which the Company acquired through the Merger:

The University of Texas M. D. Anderson Cancer Center and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

On September 11, 2006, the Company acquired rights and assumed obligations under a license agreement among Apthera and The University of Texas M. D. Anderson Cancer Center ("MDACC") and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. ("HJF") which grants exclusive worldwide rights to a United States patent covering the nelipepimut-S peptide and several United States and foreign patents and patent applications covering methods of using the peptide as a vaccine. Under the terms of this license, the Company is required to pay an annual maintenance fee of \$0.2 million, clinical milestone payments and royalty payments based on sales of NeuVax or other therapeutic products developed from the licensed technologies.

Biovascular, Inc.

On December 20, 2013, Mills and BioVascular, Inc. ("BioVascular") entered into an exclusive license agreement. In 2014, through the Company's acquisition of Mills, the Company's wholly owned subsidiary, the Company acquired worldwide rights to develop and commercialize anagrelide controlled release formulation, GALE-401. GALE-401 contains the active ingredient anagrelide, an FDA-approved product that has been in use since the late 1990s for the treatment of myeloproliferative neoplasms. Under the terms of the license agreement, Mills has agreed to pay BioVascular a mid-to-low single digit royalty on net revenue from the sale of licensed products, pay future cash milestone payments based on the achievement of specified regulatory milestones and is responsible for patent prosecution and maintenance.

On September 5, 2017, Mills and BioVascular entered into an amendment to license agreement to modify the certain terms of the license agreement, including but not limited to, (i) eliminating the 3% royalty rate on annual net sales of \$50.0 million and the 4% royalty now applies to annual net sales of up to \$100.0 million, (ii) making an advance payment of approximately \$0.4 million for the milestone related to the initiation of the Phase 3 clinical trial payable in two tranches with the first payment of \$0.2 million payable on or before October 31, 2017 and the second payment of approximately \$0.2 million payable 30 days after the consummation of the Merger but no later than December 31, 2017, (iii) adding a payment for a sublicense by Mills to a third party of 25% of any cash received for upfront fees or milestone payments if the sublicense is executed prior to first patient enrolled in the Phase 3 clinical trial and 17.5% of any cash received for upfront fees or milestone payments if the sublicense is executed after the first patient is enrolled in the Phase 3 clinical trial, and (iv) if the first patient is not enrolled in the Phase 3 clinical trial by December 31, 2018, BioVascular shall have the right to terminate the license agreement and the advance payment shall not be repaid to Mills. Under the terms of a September 5, 2017 consent between Comerica Bank, BioVascular and Mills, Comerica Bank shall receive \$0.1 million of the approximately \$0.4 million advance payment from Mills.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

Teva Pharmaceuticals

In conjunction with the Merger, acquisition of NeuVax, and effective December 3, 2012, the Company entered into a license and supply agreement with ABIC Marketing Limited (“ABIC”), a subsidiary of Teva Pharmaceuticals. Under the agreement, the Company granted ABIC exclusive rights to seek marketing approval in Israel for NeuVax for the treatment of breast cancer following its approval by the FDA or the EMA, and to market, sell and distribute NeuVax in Israel assuming such approval is obtained. ABIC’s rights also include a right of first refusal in Israel for all future indications for which NeuVax may be approved.

Under the license and supply agreement, ABIC will assume responsibility for regulatory registration of NeuVax in Israel, provide financial support for local development, and commercialize the product in the region in exchange for making royalty payments to us based on future sales of NeuVax. ABIC also agrees in the license and supply agreement to purchase all supplies of NeuVax from the Company at a price determined according to a specified formula.

Dr. Reddy’s Laboratories Ltd.

In conjunction with the Merger, acquisition of NeuVax, and effective January 14, 2014, the Company entered into a strategic development and commercialization partnership with Dr. Reddy’s Laboratories Ltd. (“Dr. Reddy’s”), under which the Company licensed commercial rights in India to Dr. Reddy’s for NeuVax in breast and gastric cancers. The Company has an agreement with Dr. Reddy’s to conduct a Phase 2 investigational study in gastric cancer in India. To date, Dr. Reddy’s has not initiated the Phase 2 study with NeuVax.

Kwang Dong Pharmaceutical Co., Ltd.

In conjunction with the Merger, acquisition of NeuVax, and effective April 30, 2009, the Company entered into a license agreement with Kwang Dong Pharmaceutical Co, Ltd. (“Kwang Dong”). Under the agreement, the Company granted Kwang Dong exclusive rights to seek marketing approval in The Republic of Korea, or South Korea for NeuVax for the treatment of breast cancer following its approval by the FDA or the EMA, and to market, sell and distribute NeuVax in South Korea assuming such approval is obtained.

7. Fair Value Measurements

The following tables present information about the Company’s assets and liabilities measured at fair value on a recurring basis in the consolidated balance sheets (in thousands):

<u>Description</u>	<u>December 31, 2017</u>	<u>Quoted Prices In Active Markets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Unobservable Inputs (Level 3)</u>
Assets:				
Cash equivalents	\$ 1,662	\$ 1,662	\$ —	\$ —
Restricted cash equivalents	10,245	10,245	—	—
Total assets measured and recorded at fair value	<u>\$ 11,907</u>	<u>\$ 11,907</u>	<u>\$ —</u>	<u>\$ —</u>
Liabilities:				
Warrants potentially settleable in cash	\$ 1,309	\$ —	\$ —	\$ 1,309
Contingent consideration	1,294	—	—	1,294
Total liabilities measured and recorded at fair value	<u>\$ 2,603</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 2,603</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Company did not transfer any financial instruments into or out of Level 3 classification during the year ended December 31, 2017. The contingent consideration was assumed by the Company in connection with the Merger and recorded at fair value as of the consummation of the Merger, which approximates fair value as of December 31, 2017. The fair value of the contingent consideration is measured at the end of each reporting period using Level 3 inputs in a probability-weighted, discounted cash-outflow model. The contingent consideration relates to Galena's acquisition of Aphera, Inc. in 2011 and the future contingent payments of up to \$32 million based on the achievement of certain development and commercial milestones relating to the Company's NeuVax™ product candidate. The contingent consideration is payable at the election of the Company in either cash or shares of common stock, provided that the Company may not issue any shares in satisfaction of any contingent consideration unless it has first obtained approval of its stockholders in accordance with Rule 5635(a) of the Nasdaq Marketplace Rules. The significant unobservable assumptions include the probability of achieving each milestone, the date we expect to reach the milestone, and a determination of present value factors used to discount future expected cash outflows.

At December 31, 2016, the estimated fair value of the 2015 Notes was \$7.3 million, which compared to a carrying value of \$7.4 million. See also Note 9.

See Note 12 for discussion of the Level 3 liabilities relating to warrants accounted for as liabilities.

8. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	Year Ended December 31,	
	2017	2016
Professional fees	\$ 1,744	\$ 1,077
Value added tax	426	—
Rebates and returns	223	—
Compensation and related benefits	566	249
Clinical trial costs	51	2,496
Other	191	227
Accrued expenses and other current liabilities	<u>\$ 3,201</u>	<u>\$ 4,049</u>

9. Debt

Debt and convertible debt consist of the following (in thousands):

	Year Ended December 31,	
	2017	2016
Debt		
Current portion of Senior Secured Debenture	\$ 8,377	\$ —
Non-current portion of Senior Secured Debenture	2,611	—
Total debt	<u>\$ 10,988</u>	<u>\$ —</u>
Convertible debt		
2015 Shareholder Notes	\$ —	\$ 1,709
2015 Sely Note	—	5,659
Total convertible debt	<u>\$ —</u>	<u>\$ 7,368</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

Senior Secured Debenture

On May 10, 2016, the Company's predecessor company, Galena entered into a securities purchase agreement, with JGB pursuant to which Galena sold to JGB, at a 6.375% original issue discount, a \$25.5 million senior secured debenture (the "Senior Secured Debenture") and warrants to purchase up to 3,333 shares of Galena's common stock, \$0.0001 par value per share. Net proceeds to Galena from sale of the Senior Secured Debenture and warrants, after payment of commissions and legal fees, was approximately \$23.4 million. The Senior Secured Debenture contained no conversion features to shares of common stock. The Senior Secured Debenture remains outstanding for the Company through the consummation of the Merger with Galena on December 29, 2017.

The Senior Secured Debenture matures on November 10, 2018, and accrues interest at 9% per year, payable monthly. In addition, on the maturity date of the Senior Secured Debenture (or such earlier date that the principal amount of the Senior Secured Debenture is paid in full by acceleration or otherwise) a fixed amount, which shall be deemed interest under the Senior Secured Debenture, equal to \$0.8 million will be due and payable to JGB of the Senior Secured Debenture on such date in, at the option of the Company, cash and, subject to the same conditions for the payment of interest in shares of the Company's common stock, or a combination of cash and the Company's common stock

The Company's obligations under the Senior Secured Debenture are secured under the security purchase agreement by a senior lien on all of the Company's assets, including all of the Company's interests in its consolidated subsidiaries. Under the subsidiary guarantee agreement, each subsidiary guarantees the performance of the Company of the securities purchase agreement, Senior Secured Debenture and related agreements.

The Senior Secured Debenture was amended in August 2016, May 2017, July 2017 and August 2017. After giving effect to the amendments, the Senior Secured Debenture contains the following modified and/or additional terms, among others:

- JGB can from time to time during the term of the Senior Secured Debenture require the Company to prepay in cash all or a portion of the outstanding principal plus accrued and unpaid interest (the "Outstanding Amount") on written notice to the Company, provided, that such prepayment amount shall not exceed the lesser of \$18.5 million and the outstanding principal amount. If JGB elects such prepayment of the Senior Secured Debenture, then the number of shares subject to the warrants issued to the holder will be reduced in proportion to the percentage of principal and accrued interest required to be prepaid by the Company. The Company does not have the right to prepay.
- JGB has the right, which commenced on November 10, 2016, to require the Company to redeem the outstanding principal amount, up to the outstanding principal amount of the Senior Secured Debenture by written notice to the Company and may deliver an unlimited number of redemption notices during any calendar month.
- The Company has the option to pay outstanding principal redemptions and monthly interest in shares of common stock, cash, or a combination of shares of common stock and cash. Among the various conditions that must be satisfied (or waived) in order for the Company to be able to elect to satisfy the redemption amounts in shares of common stock: (a) the VWAP of \$10.50 per share on any trading day that a redemption notice is delivered (b) no event of default has occurred and is continuing and (c) the Company's cash on hand exceeds the outstanding principal amount by at least \$10.0 million. In the event that any of these conditions are not met, the Company does not have the option to pay outstanding principal redemptions and monthly interest in cash.
- The stock payment price to satisfy outstanding principal redemptions and monthly interest is the lower of (a) 80% of the VWAP for the trading day immediately prior to the date of the applicable redemption notice (the "Prior Day VWAP") and (b) 80% of the average of the three lowest VWAPs during the 20 consecutive trading day period immediately preceding the date of the applicable redemption notice (the "Twenty Day VWAP"); provided, however, to the extent that, on any given trading day, the price per share of common stock on such trading day equals or exceeds 115% of the Prior Day VWAP or Twenty Day VWAP, then for the such trading day, and such trading day only, each reference to 80% shall be deemed, for such trading day only, to be 92.5%

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

- The Company was required to maintain a minimum of the lesser of \$18.5 million or the outstanding principal amount of unencumbered cash in a restricted account. As of December 31, 2017, the Company maintained \$10.2 million of cash and cash equivalents in a restricted account equal to the outstanding principal amount.

As of December 31, 2017, the outstanding principal balance of the Senior Secured Debenture was \$10.2 million. In addition to the outstanding principal balance, on the earlier of the maturity date or the date that the principal amount is paid in full, the Senior Secured Debenture has a \$0.8 million additional interest amount that is included in the current portion of long-term debt as of December 31, 2017. Subsequent to December 31, 2017, the holder of the Senior Secured Debenture redeemed an additional \$2.6 million of outstanding principal, which the Company satisfied with a combination of 623,749 shares of the Company's common stock and redeemed \$0.6 million of outstanding principal, which the Company satisfied with \$0.6 million in cash. As of result of the redemptions, the Company was able to transfer \$3.2 million out of restricted cash and cash equivalents and into unrestricted cash and cash equivalents to be used to fund the Company's ongoing operations. The principal redemptions of \$2.6 million subsequent to December 31, 2017 that were satisfied with shares of the Company's common stock are classified as long-term debt, as of December 31, 2017, as the amounts were not satisfied with working capital.

2015 Convertible Term Notes, as of December 31, 2017

On April 2, 2015, the Company issued an aggregate of \$1.5 million in principal amount of convertible term notes to certain stockholders of the Company (the "2015 Shareholder Notes") and on May 7, 2015, the Company issued a convertible term note in the principal amount of \$5.0 million to EQC Biotech Sely I Fund ("EQC Sely I Fund"), a related party of the Company (the "2015 Sely Note" and, together with the 2015 Shareholder Notes, the "2015 Notes"). The holders of the 2015 Shareholder Notes include two of the significant stockholders and founding investors of the Company, Drs. Angelos M. Stergiou (M.D., ScD h.c.), the Company's CEO and Miltiadis Sougioultzoglou (M.D.). The 2015 Notes were issued at par and bear an interest rate of 8%. The 2015 Shareholder Notes matured on April 2, 2017 and the 2015 Sely Note originally matured on May 7, 2017.

In August 2017, the Company and EQC Sely I Fund further amended the 2015 Sely Note to agree the number of shares issuable upon consummation of the Merger. Accordingly, contingent upon and effective immediately prior to completion of the Merger, the Company will issue to EQC Sely I Fund 632,328 of its common shares and 5-year warrants to purchase 316,163 of its common shares at a post-Merger price equal to 105% of the volume weighted average price of Galena common stock for the 30 calendar days following the closing date of the Merger (described above in Note 1), in full satisfaction of the 2015 Sely Note.

On June 13, 2017, the Board of Directors approved a \$7.3 million capital increase (the "Bridge Financing"), pursuant to which an aggregate of 1,865,261 shares were issued at a price per share equal to approximately \$3.91.

As part of the Bridge Financing, an aggregate of \$1.3 million (330,551 shares) was subscribed by certain stockholders who are also the holders of the 2015 Shareholder Notes. The cash proceeds were used to partially offset the principal (\$1.2 million) and cumulative accrued interest (\$0.1 million) due on the 2015 Shareholder Notes. Following the Bridge Financing, the Company extinguished in cash its remaining obligations on the 2015 Shareholder Notes, which included \$0.3 million of principal and \$0.2 million of cumulative accrued interest as of June 21, 2017.

On December 29, 2017, the Company issued 632,326 shares of common stock and warrants to purchase 316,163 of its common stock in full satisfaction of the 2015 Sely Note. The 2015 Sely Note conversion was considered to be an induced conversion and extinguishment and the Company realized a loss of \$0.7 million during the year ended December 31, 2017. The Company considered the extinguishment to be a capital transaction and it was therefore recorded in the Company's consolidated statements of stockholders' equity (deficit).

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

2016 Convertible Term Note

On June 30, 2016, the Company issued a \$15.0 million convertible term note to EQC Sely I Fund (the “2016 Note”). The 2016 Note was issued at par and had an interest rate of 8%. The 2016 Note was issued with similar terms to the 2015 Notes (excluding the warrant coverage) whereby the 2016 Note is mandatorily convertible into equity upon the earlier to occur: a) the closing of a qualified IPO, b) a change in the Company’s domicile from Switzerland to Bermuda or c) the six-month anniversary of the note.

On November 1, 2016, the Company redomiciled its operations from Switzerland to Bermuda and therefore, the 2016 Note, together with accrued interest, was converted into 236,705 shares of its common stock based upon a pre-agreed valuation, which represented fair value at the commitment date. Interest accrued on the 2016 Note up to the date of conversion was \$0.4 million. No gain or loss was recognized upon the conversion.

Long-term Debt

On March 2, 2015, the Company entered into a loan agreement with a third party whereby the third party granted a \$2.5 million loan to the Company (the “2015 Loan Agreement”). On December 24, 2015, the counterparty to the 2015 Loan Agreement reassigned all of its rights, interests and benefits under such agreement to Starcove Ltd., a company incorporated in Cyprus and a shareholder of the Company (“Starcove”). There were no further changes made to the 2015 Loan Agreement as a result of the reassignment. The term of the loan granted under the 2015 Loan Agreement was 24 months with an interest rate of 8%.

On April 6, 2016, the Company entered into a second loan agreement with Starcove (the “Framework Loan Agreement”), whereby Starcove extended a line of credit to the Company of \$1.5 million with an interest rate of 6%. The term of the Framework Loan Agreement was three years. All principal and accrued interest would be payable in a single payment on April 6, 2019 unless earlier paid but no sooner than six months from the date of the Framework Loan Agreement.

As of December 31, 2016, the Company had made three withdrawals under the credit line: (1) \$0.6 million on April 12, 2016, (2) \$0.6 million on May 12, 2016 and (3) \$0.3 million on June 2, 2016.

On November 1, 2016, an aggregate amount of \$4.4 million, which represented the principal and accrued interest under the 2015 Loan Agreement and the Framework Loan Agreement (together, the “Starcove Loans”), was extinguished upon the issuance of 67,140 shares of the Company’s common stock with an estimated fair value equal to the carrying value of the debt.

On November 25, 2013, the Company entered into a loan agreement with a shareholder, whereby the shareholder granted a EUR 1.8 million loan to the Company (the “2013 Loan Agreement”). The term of the loan was open-ended and had an interest rate of 5%. On January 1, 2014, the principal amount of the 2013 Loan Agreement, together with accrued interest, was re-assigned on a 50:50 basis to the Company’s co-founders, Drs. Angelos M. Stergiou (M.D., Sc.D. h.c.) and Miltiadis Sougioultzoglou (M.D.).

On December 31, 2015, the Company entered into an agreement with each of Drs. Stergiou and Sougioultzoglou, whereby the Company’s aggregate obligation of EUR 1.8 million, together with accrued interest equal to EUR 0.1 million as of such date, as well as an additional EUR 0.1 million of payables due to them from the Company, were offset by an aggregate amount of EUR 0.7 million representing receivables due to the Company from Drs. Stergiou and Sougioultzoglou pursuant to various other agreements that were entered into in 2012 and 2013. As a result, as of December 31, 2015, the amount of the Company’s outstanding loans to Drs. Stergiou and Sougioultzoglou were EUR 0.7 million and EUR 0.6 million, respectively (each, a “Founder Loan” and together, the “Founder Loans”). The interest rate on the Founder Loans was 2.5% and the term of the Founder Loans was three years. The original and modified loans were not considered substantially different as the difference between the present value of the remaining cash flows under the original and the modified terms was less than 10%. As such, extinguishment accounting did not apply.

On November 1, 2016, an aggregate amount of EUR 0.7 million and EUR 0.6 million, which represented the principal and accrued interest under each respective Founder Loan, were converted into 11,571 and 10,383 shares, respectively. The number of shares issued was based on the fair value of the Company’s shares at the conversion date and therefore no gain or loss was recognized upon the cancellation of the loans.

10. Commitments and Contingencies

Legal Proceedings

From time to time, the Company is subject to various pending or threatened legal actions and proceedings, including those that arise in the ordinary course of its business, which may include employment matters, breach of contract disputes and stockholder litigation. Such actions and proceedings are subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for extended periods of time. The Company records a liability in its consolidated financial statements for costs related to claims, including future legal costs, settlements and judgments, when the Company has assessed that a loss is probable and an amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. The Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred. In the opinion of management, as of the date hereof, the amount of liability, if any, with respect to these matters, individually or in the aggregate, will not materially affect the Company’s consolidated results of operations, financial position or cash flows.

The Company’s predecessor company, Galena was involved in multiple legal proceedings and administrative actions, including stockholder class actions, both state and federal, some of which are ongoing and to which the Company is now subject as a result of the Merger. They are as follows:

Settled Matters

On December 16, 2015, Galena received a subpoena issued by the U.S. Attorney's Office for the District of New Jersey ("USAO NJ"), requesting the production of a broad range of documents pertaining to Galena's marketing and promotional practices for Abstral. Through its communications with the USAO NJ and the U.S. Department of Justice ("DOJ"), Galena came to understand that the investigation being undertaken by the USAO NJ and DOJ was a criminal investigation in addition to a civil investigation that could ultimately involve Galena as well as one or more former employees. Pursuant to Galena's charter, Galena was reimbursing certain former employees' attorney's fees with respect to the investigation but stopped on May 1, 2017. Galena cooperated with the civil, and is continuing to cooperate with the criminal, investigations, and on September 8, 2017, DOJ announced a settlement agreement with Galena regarding the USAO NJ's and DOJ's investigation. The settlement agreement involves a non-criminal resolution and a civil payment in equal installments over twelve months of approximately \$7.6 million, plus interest accrued since the date of reaching an agreement in principle, in return for a release of government claims in connection with the investigation. The \$7.6 million civil payment is payable over four equal quarterly installments, with the first payment being made in the third quarter of 2017. As set forth in that settlement agreement, for a release of all claims against Galena and its officers and directors and dismissal with prejudice of the qui tam lawsuit described below, the relator received a portion of the civil payment to the federal government. On December 29, 2017, Galena made the remaining three payments to the federal government, which has advised us that all sums due and payable under the settlement agreement have been paid.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

In addition, there is a qui tam action pending in the U.S. District Court of the District of New Jersey related to the investigation by USAO NJ and DOJ. On September 18, 2017, Galena executed a settlement agreement with the attorneys for the relator in the qui tam action to settle the statutorily mandated attorney fees award by payment of \$0.1 million in cash and \$0.2 million in Galena common stock subject to court approval, which amounts were accrued during the second quarter 2017. Galena also obtained the consent of Private SELLAS under the terms of the Merger Agreement. However on November 7, 2017, attorneys for the qui tam relator agreed to have Galena pay the \$0.2 million in cash. Galena also obtained the consent of Private SELLAS under the terms of the Merger Agreement. Galena paid the \$0.3 million in cash for the statutorily mandated attorney fees award in the fourth quarter of 2017. As a result of receiving the portion of the civil settlement payment noted above and the settlement payment of the statutorily mandated attorney fees award, the relator will dismiss with prejudice the claims against Galena in the qui tam lawsuit.

Open Matters

On October 13, 2016, Galena filed a complaint in the Circuit Court for the County of Multnomah for the State of Oregon against Aon Risk Insurance Services West, Inc. (Aon) where Galena is seeking attorney's fees, costs and expenses incurred by Galena related to its coverage dispute with a certain insurer and for amounts Galena was required to contribute to the settlements of In re Galena Biopharma, Inc. Derivative Litigation and In re Galena Biopharma, Inc. Securities Litigation as a direct result of certain insurer's failure to pay its full policy limits of liability and other relief. Galena and Aon are currently engaged in written discovery.

On February 13, 2017, a putative stockholder securities class action complaint was filed in the U.S. District Court for the District of New Jersey captioned, Miller v. Galena Biopharma, Inc., et al. On February 15, 2017, a putative stockholder securities class action complaint was filed in the U.S. District Court for the District of New Jersey entitled, Kattuah v. Galena Biopharma, Inc., et al. The actions assert that the defendants failed to disclose that Galena's promotional practices for Abstral® (fentanyl sublingual tablets) were allegedly improper and that Galena may be subject to civil and criminal liability, and that these alleged failures rendered Galena's statements about its business misleading. Two groups of stockholders and one individual stockholder filed three motions to be appointed lead plaintiff on April 14, 2017 and April 17, 2017.

Subsequently, one of the stockholders groups withdrew its motion for lead plaintiff status and the individual stockholder notified the Court that he does not object to the appointment of the remaining stockholder group, GALE investor group, as lead plaintiff. On July 17, 2017, the Court approved the GALE investor group as named lead plaintiff and its counsel as lead and liaison counsel. The Court also consolidated both actions. An amended complaint was filed on October 6, 2017. On December 15, 2017, Galena and the former officers and employees filed a motion to dismiss the amended complaint. The plaintiffs have responded to a former officer's motion to dismiss on February 13, 2018 and will respond to Galena's and the other former officers' and employees' motion to dismiss on March 2, 2018. Galena and the former officers and employees are expected to file a reply in April of 2018. Thereafter, Galena will take the matter under advisement. It is not known when the Court will issue a ruling in this matter.

On March 16, 2017, a complaint captioned Keller v. Ashton et al., CA No. 2:17-cv-01777 was filed in the U.S. District Court for the District of New Jersey against Galena's former directors and the Company, as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on Galena's behalf against its former directors based on substantially similar facts as alleged in the putative stockholder securities class action complaints mentioned above. Galena's response to the complaint was due on June 1, 2017; however, the Court on May 21, 2017, entered a stay of the proceedings pending resolution of motions to dismiss in the securities litigations described above.

Galena also received a stockholder demand dated April 14, 2017, pursuant to 8 Del. C. Sec. 220, from a stockholder (Albert Zhang) demanding access to Galena's books and records relating to its sales of Abstral and the U.S. Attorney's investigation into Galena's sale of Abstral in order for Mr. Zhang to determine, among other things, whether to file a derivative lawsuit against Galena's former management and directors. Galena has responded to the demand and Mr. Zhang has indicated that he will file a derivative complaint soon.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

On April 27, 2017, a putative stockholder class action was filed in the Court of Chancery of the State of Delaware captioned Patel vs. Galena Biopharma, Inc. et. al, CA No. 2017-0325-JTL seeking relief under Section 225 of the Delaware General Corporation Law (DGCL) and alleging breaches of fiduciary duties by Galena's former board of directors and former interim chief executive officer regarding proposals to amend Galena's certificate of incorporation to increase the amount of authorized shares of common stock and effectuate a reverse stock split at the July 2016 and October 2016 stockholder meetings, respectively. On June 2, 2017, an amended verified complaint was filed along with a motion to expedite the proceedings. On June 5, 2017, Galena filed a verified petition under Section 205 of the DGCL and a motion to expedite the proceedings. On June 8, 2017, the Court denied a request by the plaintiff to schedule a preliminary injunction motion and ordered a prompt trial on both the plaintiff and Galena's claims. On June 20, 2017, the Court consolidated the claims into In re Galena Biopharma, Inc., C. A. No. 2017-0423-JTL. On July 10, 2017, the Court ordered that the trial of the claims be held on August 28, 30 and 31, 2017. On July 24, 2017, Galena entered into a binding settlement term sheet, which the Court enforced on November 30, 2017, over the objection of the plaintiff. On December 8, 2017, the Court set the hearing on the settlement for March 15, 2018. On December 11, 2017, the Court also granted an order validating the ratification votes at the special stockholder meeting held on July 6, 2017 and the certificate of amendments filed by Galena for the increase in authorized shares in 2011, 2013, 2015, and 2016 as well as for the reverse stock split in 2016. On February 22, 2018, the plaintiff filed his brief in support of the settlement as well as his request for attorneys' fees and an incentive award. On March 1, 2018, the former directors and former interim chief executive officer responded to plaintiff's brief. On February 28, 2018, the former directors and former interim chief executive officer requested the Court continue the date of the hearing to approve the settlement as the Company was working with the staff of the SEC to obtain the no-action letter required by the binding settlement term sheet. The Plaintiff objected to such continuance. On March 15, 2018, the Court ruled in favor of the Company and continued the settlement hearing for 90 days.

Under the terms of the settlement, the class will receive a settlement payment of \$1.3 million, in addition to attorney fees in an amount to be approved by the Court. The settlement payment of \$1.3 million consists of \$50,000 in cash to be paid by the Company or its insurers and \$1,250,000 in unrestricted shares of the Company's common stock ("Settlement Stock"), which valuation will be based on the volume-weighted average closing price for the 20 trading days immediately preceding the day before the transfer of the Settlement Stock to the settlement fund pursuant to the terms and conditions of the settlement. The Company anticipates that the Settlement Stock will be issued, pursuant to the terms of the Stipulation of Settlement, in a transaction that is exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Section 3(a)(10) of the Securities Act. Any amounts awarded by the Court for attorneys' fees will be paid in part by the settlement fund and in part by the Company's insurance carriers. Upon the effectiveness of the proposed settlement, the individual defendants will be released from the claims that were asserted or could have been asserted in the class action by class members participating in the settlement.

On July 6, 2017, a complaint captioned Jacob v. Schwartz et al., Case No. C17-01222, was filed in the Superior Court of California, County of Contra Costa against Galena's former directors and the Company, as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on Galena's behalf against its former directors based on substantially similar facts as alleged in the derivative complaint mentioned above. Galena's response to the complaint was due on July 7, 2017; however, the Court on September 5, 2017, entered a stay of the proceedings pending resolution of motions to dismiss in the securities litigations described above.

On November 7, 2017, a written demand was made on Galena by a stockholder requesting that additional financial projections and valuation analyses be made in Galena's Form S-4 relating to the Merger, which was declared effective on November 6, 2017. The demand stated, among other thing, that, if such disclosures are not made within a reasonable period of time, the stockholder intends to file a securities class action lawsuit in federal court. Galena has resolved the matters raised in the demand letter through a nominal monetary payment and additional disclosures in the Form S-4.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

On January 23, 2018, a complaint captioned Johnson v Schwartz et al., CA No. 2:18-cv-00903 was filed in the U.S. District Court for the District of New Jersey against Galena’s former directors, officers and employees and the Company as a nominal defendant. The complaint purports to assert derivative claims for breach of fiduciary duty on Galena’s behalf against its former directors, officers and employees based on substantially similar facts as alleged in the putative stockholder securities class action complaints and derivative complaints mentioned above, as well as making demand futility allegations against the current board of directors, who are not named as defendants. It is expected that the Company and the individual defendants will respond to the complaint through an appropriate pleading or motion and, if necessary, seek an order from the Court staying the proceedings pending further developments in the securities litigations described above.

On or about April 9, 2018, JGB filed a lawsuit in the U.S. District Court for the Southern District of New York captioned *JGB (Cayman) Newton, Ltd. v. Sellas Life Sciences Group, Inc., et al.*, Case 1:18-cv-3095 (DLC), or the JGB Action. The complaint in the JGB Action asserts claims under state law and federal securities law against us, our Chief Executive Officer, Angelos M. Stergiou, M.D., ScD H.C, and our Interim Chief Financial Officer, Aleksey N. Krylov (Mr. Krylov together with the Company and Dr. Stergiou, the Defendants). The complaint in the JGB Action alleges, among other things, that we breached a contractual obligation to deliver certain shares of our common stock to JGB and that, in the course of negotiations related to the senior secured debenture agreement, the Defendants failed to disclose to JGB certain information regarding positive clinical trial results that was not then public. According to the complaint, JGB seeks to receive 2,483,500 shares of our common stock, damages, and costs and expenses incurred in the JGB action, among other things. We dispute the claims in the JGB Action and intend to defend against them vigorously.

Contingent Consideration related to Development, Regulatory and Commercial Milestone Payments and Business Combinations

The Company acquires assets still in development and enters into research and development arrangements with third parties that often require milestone and royalty payments based on the progress of the asset through development stages. Milestone payments may be required, for example, upon approval of the product for marketing by a regulatory agency. In certain agreements, the Company is required to make royalty payments based upon a percentage of the sales. Because of the contingent nature of these payments, they are not included in the table of contractual obligations shown below.

These arrangements may be material individually, and in the unlikely event that milestones for multiple products covered by these arrangements were reached in the same period, the aggregate charge to expense could be material to the results of operations. In addition, these arrangements often give the Company the discretion to unilaterally terminate development of the product, which would allow the Company to avoid making the contingent payments; however, the Company is unlikely to cease development if the compound successfully achieves clinical testing objectives. For additional information on the Company’s commitments under collaboration and license agreements read Note 6 to these consolidated financial statements. For additional information on the Company’s commitments of contingent consideration read Note 7 to these consolidated financial statements.

Commitments

The Company rents office space under a non-cancelable operating lease. Rental expense amounted to \$0.2 million for the years ended December 31, 2017 and 2016. The Company’s contractual obligations that may require future cash payments as of December 31, 2017 under the non-cancelable operating lease are as follows (in thousands):

	Operating Leases
2018	\$ 223
2019	76
Total	<u>\$ 299</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

11. Stockholders' Equity (Deficit)

On June 13, 2017, the Board of Directors approved the Bridge Financing, pursuant to which an aggregate of 1,865,262 shares were issued at a price per share equal to approximately \$3.91.

Under the same valuation terms as the Bridge Financing, the Company issued 38,321 shares to MSK in cancellation of a \$0.2 million milestone payment due June 30, 2017, as contemplated by the MSK Side Letter. In addition, the Company issued 30,094 shares in cancellation of a \$0.1 million Equilibria management fee that was payable for March to June 2017, and 28,246 shares in cancellation of net compensation of \$0.1 million due to Dr. Angelos Stergiou (M.D., Sc.D. h.c.), the Company's Chief Executive Officer.

Shares of common stock as of December 31, 2017 for future issuance are reserved for as follows (in thousands):

Warrants outstanding	963
Stock options outstanding	10
Restricted stock units	13
Options reserved for future issuance under the Company's 2017 Equity Incentive Plan	575
Shares reserved for future issuance under the Employee Stock Purchase Plan	58
Total reserved for future issuance	<u>1,619</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

12. Warrants

The following is a summary of warrant activity for the years ended December 31, 2017 (in thousands):

<u>Warrant Issuance</u>	<u>Outstanding, January 1, 2017</u>	<u>Granted</u>	<u>Assumed through Merger</u>	<u>Expired</u>	<u>Outstanding, December 31, 2017</u>	<u>Expiration</u>
2017 Equilibria	—	316	—	—	316	December 2022
Galena February 2017	—	—	567	—	567	February 2022
Galena other	—	—	80	—	80	Various to 2022
	<u>—</u>	<u>316</u>	<u>647</u>	<u>—</u>	<u>963</u>	

Warrants assumed in connection with the acquisition of Galena consist of warrants that may be settled in cash, which are liability-classified warrants, and equity-classified warrants. Subsequent to December 31, 2017, 501,000 of the Company's February 2017 warrants to purchase shares of common stock were cancelled under various warrant exchange agreements as disclosed in Note 16.

Warrants classified as liabilities

Liability-classified warrants consist of warrants to purchase common stock issued in connection with previous equity financings for the February 2017 financing and various other equity financings (the Company) that were assumed by the Company at the consummation of the Merger. These warrants may settle in cash and were determined not to be indexed to the Company's common stock.

The estimated fair value of outstanding warrants accounted for as liabilities is determined at each balance sheet date. Any decrease or increase in the estimated fair value of the warrant liability since the most recent balance sheet date is recorded in the consolidated statement of operations as other income (expense). The fair value of the warrants as of December 31, 2017 is estimated using a Black-Scholes pricing model with the following inputs:

<u>Warrant Issuance</u>	<u>Outstanding (in thousands)</u>	<u>Strike price (per share)</u>	<u>Expected term (years)</u>	<u>Volatility%</u>	<u>Risk-free rate %</u>
Galena February 2017	567	\$ 33.00	4.12	79.29%	2.09%
Galena other	76	\$ 888.22	2.74	72.46%	2.00%

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The expected volatility assumptions are based on the Company's implied volatility in combination with the implied volatilities of similar publicly traded entities. The expected term assumptions are based on the remaining contractual terms of the warrants. The risk-free rate is based on the zero-coupon rates in effect at the time of valuation. The dividend yield used in the pricing model is zero, because the Company has no present intention to pay cash dividends.

The changes in fair value of the warrant liability for the year ended December 31, 2017 were as follows (in thousands):

	Warrant liability, January 1, 2017	Fair value of warrants granted	Fair value of warrants acquired	Change in fair value of warrants	Warrant liability, December 31, 2017
Warrant Issuance					
Galena February 2017	\$ —	\$ —	\$ 1,305	\$ —	\$ 1,305
Galena other	—	—	4	—	4
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,309</u>	<u>\$ —</u>	<u>\$ 1,309</u>

Warrants classified as equity

The Company issued 316,163 warrants to purchase shares of the Company's common stock at an exercise price of \$7.42, maturing five years from issuance, to EQC Private Markets SAC Fund Ltd—EQC Biotech Sely I Fund on December 29, 2017. These warrants are recorded in equity at fair value upon issuance, and not as liabilities, and are not subject to adjustment to fair value in subsequent reporting periods. The fair value of the warrants granted was \$5.60 per share using the Black-Scholes pricing model with the fair value assumptions for the grant including a volatility of 90.10%, expected term of five years, risk free rate of 2.20%, and a dividend rate of 0.00.

13. Stock-Based Compensation

Share and per share amounts below have been retroactively adjusted to reflect the exchange ratio and reverse stock split as described in Note 1.

2017 Equity Incentive Plan

On December 29, 2017, the 2017 Equity Incentive Plan was approved, and currently allows for the issuance of up to a maximum of approximately 575,000 shares of common stock in connection with the grant of stock-based awards, including stock options, restricted stock, restricted stock units, stock appreciation rights and other types of awards as deemed appropriate, not including shares subject to awards assumed in connection with certain transactions, including the Merger. As of December 31, 2017, an aggregate of approximately 575,000 shares of common stock were reserved for issuance under the Company's 2017 Equity Incentive Plan. Upon the consummation of the Merger, the Company assumed approximately 10,171 shares subject to outstanding common stock options granted under the Company's 2016 Incentive Plan that will remain exercisable for one year for former Company employees and directors. There are approximately 575,000 shares available for future grants based on adjustments in the 2017 Equity Incentive Plan. There were no common stock options granted under the 2017 Equity Incentive Plan for the years ended December 31, 2017.

The amount of shares reserved for issuance under the 2017 Equity Incentive Plan will automatically increase on January 1st of each year, for a period of not more than ten years, commencing on January 1st of the year following the year in which the Effective Date occurs and ending on (and including) January 1, 2027, in an amount equal to 4% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year. Notwithstanding the foregoing, the board of directors may act prior to January 1st of a given year to provide that there will be no January 1st increase in the share reserve for such year or that the increase in the share reserve for such year will be a lesser number of shares of common stock than would otherwise occur pursuant to the preceding sentence.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

On November 1, 2016, the Board of Directors approved the Company's 2016 Incentive Plan under which 189,627 shares were reserved for issuance. The 2017 Equity Incentive Plan replaced the 2016 Incentive Plan.

In accordance with the 2016 Incentive Plan, the Company's employees, directors and consultants are eligible to receive non-qualified and incentive stock options and RSUs. The stock options generally vest over a 3-year period and expire 10 years from the date of the grant.

The following table summarizes the components of stock-based compensation expense in the consolidated statements of operations for the years ended December 31, 2017 and 2016, respectively (in thousands):

	<u>2017</u>	<u>2016</u>
Research and development	\$ 729	\$ 23
General and administrative	2,440	331
Total stock-based compensation	<u>\$3,169</u>	<u>\$354</u>

Options to Purchase Shares of Common Stock

There were no stock options granted during the year ended December 31, 2017. The weighted-average grant date fair value of options granted during the year ended December 31, 2016 was \$38.03. The Company uses the Black-Scholes option-pricing model and the following assumptions were used to determine the fair value of all its stock options granted in 2016:

Risk free interest rate	1.82-2.32%
Volatility	85-94%
Expected lives (years)	5.13-10.00
Expected dividend yield	0%

As of December 31, 2017, there was no unrecognized compensation cost related to outstanding stock options.

The following table summarizes stock option activity of the Company:

	<u>Total Number of Shares (In Thousands)</u>	<u>Weighted Average Exercise Price</u>	<u>Aggregate Intrinsic Value (In Thousands)</u>
Balance as of January 1, 2016	—	\$ —	\$ —
Granted	55	\$ 52.94	\$ —
Outstanding at December 31, 2016	<u>55</u>	<u>\$ 52.94</u>	<u>\$ —</u>
Assumed in connection with the Merger with Galena	10	1,240.55	\$ —
Canceled	(55)	52.94	\$ —
Outstanding at December 31, 2017	<u>10</u>	<u>\$ 1,240.55</u>	<u>\$ —</u>
Options exercisable at December 31, 2017	<u>10</u>	<u>\$ 1,240.55</u>	<u>\$ —</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The aggregate intrinsic values of outstanding and exercisable stock options at December 31, 2017 were calculated based on the closing price of the Company’s common stock as reported on the Nasdaq Capital Market on December 31, 2017 of \$7.86 per share. The aggregate intrinsic value equals the positive difference between the closing fair market value of the Company’s common stock and the exercise price of the underlying stock options.

Restricted Stock Units with Time-Based Conditions

On August 7, 2017, the Board of Directors accelerated the vesting of all outstanding restricted stock units (“RSUs”) with time-based conditions and all \$1.2 million of unrecognized stock-based compensation was recognized upon acceleration.

The following table outlines RSU activity with only a time-based condition:

	Total Number of Shares (In Thousands)	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2016	—	\$ —
Granted	46	\$ 52.94
Outstanding at December 31, 2016	46	\$ 52.94
Granted	58	\$ 3.91
Vested	(46)	\$ 52.94
Canceled	(58)	\$ 3.91
Outstanding at December 31, 2017	—	\$ —

RSUs with Time-Based and Performance-Based Conditions

In addition to the RSUs with time-based conditions, the Company granted RSUs subject to both time-based and performance-based vesting conditions to certain of its employees and non-employees pursuant to the 2016 Incentive Plan. These RSUs vest based on both (i) continued service either over a three-year measurement period or at the end of the required service period and (ii) the achievement of a liquidity event. The vesting dates for these RSUs are January 1, 2018, January 1, 2019, January 1, 2020 or February 27, 2018. The liquidity event, as defined in the relevant RSU grant agreements, will be satisfied upon the earlier of either: a) change of control or b) a qualified initial public offering.

	Total Number of Shares (In Thousands)	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2016	—	\$ —
Granted	21	\$ 52.94
Outstanding at December 31, 2016	21	\$ 52.94
Vested	—	NA
Canceled	(8)	\$ 52.94
Outstanding at December 31, 2017	13	\$ 52.94

The Company recognizes compensation expense related to these RSUs when the liquidity event is deemed probable. As such, no compensation expense was recorded during the years ended December 31, 2017 and 2016, as the liquidity event is outside the Company’s control and not deemed probable until it occurs.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

2017 Employee Stock Purchase Plan

The Company also has an employee stock purchase plan (“ESPP”) which allows employees to contribute up to 15% of their cash earnings, subject to certain maximums, to be used to purchase shares of the Company’s common stock on each semi-annual purchase date. On each offering date, each eligible employee, pursuant to an offering made under the ESPP, will be granted a right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding fifteen percent (15%) of such employee’s earnings (as defined by the Board in each offering) during the period that begins on the offering date (or such later date as the Board determines for a particular offering) and ends on the date stated in the offering, which date will be no later than the end of the Offering. As of December 31, 2017, the board of directors has not established the various parameters under the ESPP and no shares have been delivered under the ESPP. There are approximately 57,000 shares of common stock reserved for issuance under the ESPP, plus the number of shares of common stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1st following the effective date and ending on (and including) January 1, 2027, in an amount equal to the lesser of (i) 1% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year, and (ii) 102,279 shares of Common Stock.

14. Income Taxes

The loss before income taxes is as follows (in thousands):

	As of December 31,	
	2017	2016
U.S.	\$ 265	\$ 108
Non - U.S.	(23,766)	(17,788)
	<u>\$ (23,501)</u>	<u>\$ (17,680)</u>

The components of federal and state income tax expense are as follows (in thousands):

	As of December 31,	
	2017	2016
Current		
Federal	\$ 76	\$ —
State	138	42
Foreign	—	—
Total current	<u>214</u>	<u>42</u>
Deferred expense		
Federal	—	—
State	39	(41)
Foreign	—	—
Total deferred	<u>39</u>	<u>(41)</u>
Total income tax expense	<u>\$ 253</u>	<u>\$ 1</u>

The components of net deferred tax assets are as follows (in thousands):

	As of December 31,	
	2017	2016
Net operating loss carryforwards	\$ 1,028	\$ 3,145
Tax credit carryforwards	345	295
Stock based compensation	2,550	28
Licensing deduction deferral	2,105	—
Other	395	81
Gross deferred tax assets	6,423	3,549
Valuation allowance	(4,658)	(3,508)
Net deferred tax asset	<u>\$ 1,765</u>	<u>\$ 41</u>

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The components of net deferred tax liabilities are as follows (in thousands):

	As of December 31,	
	2017	2016
In-process research and development not subject to future amortization for tax purposes	\$ 3,438	\$ —
Gross deferred tax liability	<u>\$ 3,438</u>	<u>\$ —</u>

The provision for income taxes differs from the provision computed by applying the federal statutory rate to net loss before income taxes as follows:

	As of December 31,	
	2017	2016
U.S. federal statutory income tax rate	(34.0)%	(34.0)%
State and local taxes, net of federal benefit	0.4 %	— %
Foreign rate differential	34.4 %	25.5 %
Permanent differences	1.1 %	0.1 %
Tax rate change and true-up	0.3 %	— %
Other	0.2 %	— %
Valuation allowance	0.1 %	10.4 %
Tax credits	(1.4)%	(2.0)%
Effective income tax rate	<u>1.1 %</u>	<u>0.0 %</u>

At December 31, 2017, the Company had domestic federal and state net operating loss carryforwards of approximately \$3.7 million and \$3.7 million, respectively, available to reduce future taxable income, which expire at various dates beginning in 2027. The Company also had federal research and development tax credit carryforwards of approximately \$0.4 million, respectively, available to reduce future tax liabilities and which expire at various dates beginning in 2027. The income tax expense for the year ended December 31, 2016 relates to both the indefinite lived deferred tax liabilities and the December 22, 2017 enactment of the Tax Cuts and Jobs Act.

Under the provisions of the Internal Revenue Code, the net operating losses (“NOL”) and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. NOL and tax credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant shareholders over a three-year period in excess of 50%, as defined under Sections 382 and 383 of the Internal Revenue Code of 1986, respectively, as well as similar state tax provisions. This could limit the amount of tax attributes that the Company can utilize annually to offset future taxable income or tax liabilities. The amount of the annual limitation, if any, will be determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. The Company has completed several financings since its inception, which may have resulted in a change in control as defined by Sections 382 and 383 of the Internal Revenue Code or could result in a change in control in the future. Utilization of the net operating loss and tax credits carryforwards may be limited by “ownership change” rules, as defined in Section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. This annual limitation may result in the expiration of the net operating losses and credits before utilization.

In assessing the need for a valuation allowance the Company may utilize indefinite-lived deferred tax liabilities from an indefinite-lived intangible asset as a future source of income. The Company’s IPR&D, as recorded in acquisition accounting, can be utilized as a source of income arising from the future reversal of temporary difference that can be offset against post 2017 indefinite-lived NOLs. Therefore, the Company is permitted to offset the indefinite-lived DTL up to the 80 percent limitation for NOL’s generated subsequent to January 1, 2018. As such, an indefinite-lived NOL was recorded in acquisition accounting as a reduction to the valuation allowance related to deferred tax assets in the amount of \$1.8 million. The valuation allowance increased by \$1.2 million and \$1.8 million for the years ended December 31, 2017 and 2016, respectively.

The Company files income tax returns in the United States and various state jurisdictions. The Company is subject to tax examinations for the 2012 tax year and beyond. The Company does not recognize tax benefits that are not more-likely-than-not to be supported based upon the technical merits of the tax position taken. In assessing its unrecognized tax benefits, the Company has analyzed its tax return filing positions in all of the federal, state and foreign filing jurisdictions where it is required to file income tax returns, as well as all open years in those jurisdictions.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The following table indicates the changes to the Company's unrecognized tax benefits (in thousands):

	As of December 31,	
	2017	2016
Beginning of the Year - unrecognized tax benefits	\$ —	\$ —
Increases/ (Decrease) - prior year tax positions	44	—
Increases - current year tax positions	28	—
End of the Year - unrecognized tax benefits	<u>\$ 72</u>	<u>\$ —</u>

The unrecognized tax benefits, if recognized and in absence of full valuation allowance, would impact the income tax provision by \$28,000 and \$44,000 as of December 31, 2017 and 2016, respectively. As of December 31, 2017, the Company does not believe that it is reasonably possible that its unrecognized tax benefits would significantly change in the following 12 months.

In assessing the realizability of deferred tax assets, management considers whether it is more-likely-than-not that some portion or all of the deferred tax assets will not be realized in the near term. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible.

On December 22, 2017, the Tax Cuts and Jobs Act (the "2017 Tax Act") was enacted. The 2017 Tax Act includes a number of changes to existing United States tax laws that impact the company, most notably a reduction of the United States corporate income tax rate from 34% to 21% for tax years beginning after December 31, 2017. The 2017 Tax Act also provides for a one-time transition tax on certain foreign earnings and the acceleration of depreciation for certain assets placed into service after September 27, 2017 as well as prospective changes beginning in 2018, including repeal of the domestic manufacturing deduction, acceleration of tax revenue recognition, capitalization of research and development expenditures, additional limitations on executive compensation and limitations on the deductibility of interest.

15. Related Party Transactions

Management and Strategic Collaboration Agreement

Effective in June 2016, the Company and Equilibria, a company incorporated in Bermuda and a significant stockholder of the Company, entered into the management and strategic collaboration agreement. Under the Equilibria collaboration agreement, Equilibria, amongst other services, is engaged to provide certain strategic, management and capital raising advice to the Company. The Equilibria collaboration agreement is effective for three years and will be renewable thereafter only upon the mutual written agreement of both parties. The Equilibria collaboration agreement will automatically terminate upon the closing of an IPO or a strategic sale. During the term of the Equilibria collaboration agreement, the Company, in exchange for the services received, paid Equilibria a quarterly fee of \$0.1 million (the "Equilibria Management Fee"). The Equilibria Management Fee can be paid in cash or, at the mutual agreement of the parties, in shares of the Company at a valuation equal to the Company's most recent financing round. In addition to the Equilibria Management Fee, the Company has agreed to pay Equilibria any expenses reasonably incurred in performing the services agreed. For the years ended December 31, 2017 and 2016, the Company had incurred and paid in cash \$0.3 million and \$0.2 million, respectively, of Equilibria Management Fees. These amounts are included in general and administrative expense in the consolidated statements of operations. As of December 31, 2017, the Company had an outstanding payable of \$0.1 million payable to Equilibria. As of December 31, 2016, there was no outstanding fee payable to Equilibria.

For the provision of the management and strategic collaboration services, the Company also agreed to pay Equilibria an incentive fee equal to 2% of the post-money market value of the Company on the date of its IPO. Such fee will be payable in shares with a per-share price equal to the price set for the sale of the Company's shares to other investors in its IPO. The Company and Equilibria, may jointly agree to settle the incentive fee earlier, if deemed appropriate for achieving a successful IPO, through either a cash payment, issuance of shares, or a combination of the two. In the event that the Company is sold as part of a strategic sale, the incentive fee will be equal to 2% of the gross value paid by the purchaser in cash.

In February 2017, the Company and Equilibria entered into an amendment of the Equilibria collaboration agreement. Under the amendment, in the event that the Company entered into a reverse merger transaction in lieu of an initial public offering, the incentive fee to Equilibria was 2% of the post-merger fully diluted market value of the Company immediately after the closing of the reverse merger transaction, payable in a combination of cash and shares of common stock of the Company. The cash payment was based on the per share price equaling the intrinsic value of the Company's shares in the Merger. The share-based component of the incentive fee was based on the post-closing fully diluted number of shares outstanding.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

In August 2017, the Company and Equilibria further amended the Equilibria collaboration agreement to fix the compensation payable to Equilibria in connection with the completion of the Merger, described above in Note 1. Accordingly, upon consummation of the Merger on December 29, 2017, the Company incurred \$0.1 million to Equilibria and issued 119,672 shares of common stock to Equilibria at a fair value of \$0.9 million. These amounts are included in general and administrative expense in the consolidated statements of operations. Also, upon consummation of the Merger and pursuant to the amended Equilibria collaboration agreement, such agreement was terminated.

Debt

The Company has entered into several related party debt transactions with stockholders, which are described in Note 9.

MSK License Agreement

See Note 6 for information regarding the MSK License Agreement entered into by the Company. MSK owned 3.7% and 5.4% of the Company's outstanding share capital as of December 31, 2017 and 2016, respectively.

Other Related Party Transactions

The Company's Chief Executive Officer, Dr. Angelos M. Stergiou (M.D., Sc.D. h.c.) is a significant stockholder of the Company owning 7.8% and 24.0% of the Company's outstanding share capital as of December 31, 2017 and 2016, respectively. Further transactions involving the Company and Dr. Stergiou are described in Note 6 and Note 9.

On November 28, 2016, the Company granted 3,651 stock options to a prior member of the Company's Board of Directors. Such prior director is additionally a full-time employee of MSK. The option was terminated on August 6, 2017 in consideration of an approximately \$30,000 cash payment.

On November 28, 2016, the Company granted 9,107 RSUs to a member of the Company's Scientific Advisory Board pursuant to a consulting agreement for scientific advisory services to be performed on behalf of the Company (see Note 13). Additionally, such member and consultant is a full-time employee of MSK (see Note 6).

16. Subsequent Events

Warrant Exchange Agreements

On February 6, 2018, the Company and CVI Investments, Inc. ("CVI") entered into a warrant exchange agreement (the "CVI Agreement"). The Company had previously issued to CVI a warrant to purchase 99,333 shares (on a post-reverse split basis) (the "CVI Warrant") of its common stock, par value \$0.0001 per share (the "Common Stock") pursuant to the registered offering described in the Company's prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b)(5) under the Securities Act of 1933 on February 9, 2017 (the "2017 Offering" and the warrants issued in such offering, the "2017 Warrants"). Pursuant to the CVI Agreement, in exchange for CVI's agreement to surrender the CVI Warrant for cancellation, the Company agreed to issue to CVI a number of shares of Common Stock equal to the quotient resulting from dividing \$232,440 by the closing sale price of the Common Stock on the first completed trading day following the first public announcement by the Company of the material terms and conditions of a Company financing transaction.

The CVI Agreement contained a "Most Favored Nations" ("MFN") clause, allowing CVI to opt to substitute terms of warrant exchange agreements entered with other warrant holders from the 2017 Offering if CVI deemed those terms more favorable. Pursuant to this MFN provision, effective as of March 1, CVI Agreement was deemed modified as follows: Pursuant to the CVI Agreement, in exchange for the surrender and cancellation of the CVI Warrants, the Company issued to CVI a convertible promissory note in the aggregate principal amount of \$232,440.00 (the "CVI Note"). The CVI Note accrues interest on the outstanding principal amount at a rate of 5.0% per annum and the entire principal and accrued interest is due and payable on August 13, 2018. The interest rate increases to 18% per annum during a period in which there is an "event of default" under the CVI Note. The holder has the right, from time to time after April 30, 2018, to convert the outstanding principal and accrued interest into shares of Common Stock at a conversion price equal to \$7.00 per share (subject to adjustments for stock splits, combinations and the like) (the "Conversion Price"), provided that CVI may not affect any such conversions to the extent it would beneficially own in excess of 4.99% of the Company's outstanding Common Stock. At any time after an event of default has occurred (whether or not the Company has cured such default), CVI may elect to convert the outstanding principal and accrued interest into shares of Common Stock at an alternate conversion price equal to the lower of (i) the Conversion Price then in effect at the time of such conversion, or (ii) 70% of the lowest VWAP of the Common Stock on a trading day during the 10-trading period prior to such conversion. For purposes of the CVI Note, an "event of default" is deemed to have occurred upon (A) the suspension of trading of the Common Stock on the Nasdaq Capital Market for a period of five consecutive trading days, (B) the Company's failure to timely deliver shares of Common Stock upon a conversion

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

within five trading days of the applicable conversion date or upon the Company's notice that it does not intend to comply a request by Empery to convert, (C) the Company's or any of its subsidiaries' failure to timely pay any amount due under the CVI Note or the CVI Agreement, (D) the Company's bankruptcy, insolvency, liquidation, or similar proceeding, or (E) a breach by the Company of any representation, warranty or covenant contained in the CVI Note or the CVI Agreement that remains uncured for a period of three consecutive trading days. On April 2, 2018, the Company and CVI mutually agreed to waive the April 30, 2018 start date for the conversion right of the CVI Note, and CVI converted the entire outstanding balance of principal and interest on the CVI Note into 33,356 shares of Company's Common Stock. As a result, the CVI Note is fully paid.

On February 7, 2018, the Company entered into a warrant exchange agreement (the "Anson Agreement") with Anson Investments Master Fund LP ("Anson"). The Company previously issued to Anson a warrant to purchase 30,000 shares (on a post-reverse split basis) of Common Stock (the "Anson Warrant") in the 2017 Offering. Pursuant to the Anson Agreement, on February 8, 2018, the Company issued to Anson Investments 12,536 shares of Common Stock in exchange for the surrender and cancellation of the Anson Warrant.

On February 9, 2018, the Company entered into a warrant exchange agreement (the "Sabby Agreement") with Sabby Healthcare Master Fund Ltd. and Sabby Volatility Warrant Master Fund Ltd (collectively, "Sabby"). The Company had previously issued to Sabby warrants to purchase an aggregate of 83,333 shares (on a post-reverse split basis) of Common Stock (the "Sabby Warrants") pursuant to the 2017 Offering. Pursuant to the Sabby Agreement, in exchange for the surrender and cancellation of the Sabby Warrants, the Company will issue to Sabby a number of shares of Common Stock determined by dividing \$195,000 by the closing sale price of the Common Stock on the date of the closing date of the exchange. Such closing is expected to occur on or before February 13, 2018, and the Sabby Agreement will terminate if such closing does not occur by such date. The Sabby Agreement also provides that during the 30-trading day period following the closing of the exchange, Sabby will not sell in open market transactions more than 2% of the daily trading volume of Common Stock on any one trading day. Further, the Sabby Agreement provides that if the Company enters into an agreement with a holder of the 2017 Warrants that provides for the exchange of such warrants on terms more favorable than those contained in the Sabby Agreement, as determined in the reasonable discretion of Sabby, then the Company will provide written notice to Sabby and the Sabby Agreement will be deemed to have been modified in an economically and legally equivalent manner such that Sabby would receive such more favorable terms, unless Sabby elects not to accept such terms. For purposes of determining whether terms are more favorable than the terms contained in the Sabby Agreement, an exchange ratio that is based upon 100% of the then market price of the Common Stock, even if less than the price applicable to the exchange of the Sabby Warrants, is not more favorable than the terms of the Sabby Agreement.

Also on February 9, 2018, the Company entered into a warrant exchange agreement (the "Hudson Bay Agreement") with Hudson Bay Master Fund Ltd ("Hudson Bay"). The Company had previously issued to Hudson Bay a warrant to purchase an aggregate of 146,666 shares (on a post-reverse split basis) of Common Stock (the "Hudson Bay Warrant") pursuant to the 2017 Offering. Pursuant to the Hudson Bay Agreement, in exchange for the surrender and cancellation of the Hudson Bay Warrant, the Company issued to Hudson Bay a convertible promissory note in the principal amount of \$343,200 (the "Hudson Bay Note"). The Hudson Bay Agreement also provides that provides that if the Company enters into an agreement with a holder of the 2017 Warrants that provides for the exchange of such warrants on terms more favorable than those contained in the Hudson Bay Agreement, including without limitation, with respect to ratio of any cash paid, or principal amount of notes or value of Common Stock paid in exchange for such warrants, then the Company is to provide notice to Hudson Bay within one trading day of such agreement and the terms of the Hudson Bay Agreement will be deemed to have been modified in an economically and legally equivalent manner such that Hudson Bay would receive the benefit of such more favorable terms, unless Hudson Bay elects not to accept such terms by a notice delivered to the Company within 10 trading days.

The Hudson Bay Note accrues interest on the outstanding principal amount at a rate of 5% per annum and the entire principal and accrued interest is due and payable on August 9, 2018. The interest rate increases to 18% per annum during a period in which there is an "event of default" under the Hudson Bay Note. The holder has the right, from time to time after April 30, 2018, to convert the outstanding principal and accrued interest into shares of Common Stock at a conversion price equal to \$7.00 per share (subject to adjustments for stock splits, combinations and the like) (the "Conversion Price"), provided that Hudson Bay may not affect any such conversions to the extent it would beneficially own in excess of 9.99% of the Company's outstanding Common Stock. At and any time after an event of default has occurred (whether or not the Company has cured such default), Hudson Bay may elect to convert the outstanding principal and accrued interest into shares of Common Stock at an alternate conversion price equal to the lower of (i) the Conversion Price then in effect at the time of such conversion, or (ii) 70% of the lowest volume-weighted average price of the Common Stock on a trading day during the 10-trading period prior to such conversion. For purposes of the Hudson Bay Note, an "event of default" is deemed to have occurred upon (A) the suspension of trading of the Common Stock on the Nasdaq Capital Market for a period of five consecutive trading days, (B) the Company's failure to timely deliver shares of Common Stock upon a conversion within five trading days of the applicable conversion date or upon the Company's notice that it does not intend to comply a request by Hudson Bay to convert, (C) the Company's or any of its subsidiaries' failure to timely pay any amount due under the Hudson Bay Note or the Hudson Bay Agreement, (D) the Company's bankruptcy, insolvency, liquidation, or similar proceeding, or (E) a breach by the Company of any representation, warranty or covenant contained in the Hudson Bay Note or the Hudson Bay Agreement that remains uncured for a period of three consecutive trading days. On April 3, 2018, the Company and Hudson Bay mutually agreed to waive the April 30, 2018 start date for the conversion right of the Hudson Bay Note, and Hudson Bay converted the entire outstanding balance of principal and interest on the Hudson Bay Note into 49,390 shares of Company's Common Stock. As a result, the Hudson Bay Note is fully paid.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

On February 13, 2018, the Company and Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B (“Alto”) entered into a warrant exchange agreement (the “Alto Agreement”). The Company had previously issued to Alto a warrant to purchase 106,667 shares (on a post-reverse split basis) (the “Alto Warrant”) of its Common Stock pursuant to the 2017 Offering. Pursuant to the Alto Agreement, in exchange for Alto’s agreement to surrender the Alto Warrant for cancellation, the Company agreed to issue to Alto a number of shares of Common Stock equal to the quotient resulting from dividing \$249,600 by the closing sale price of the Common Stock on the closing date of the exchange. Pursuant to the Alto Agreement, on February 15, 2018, the Company issued to Alto 45,464 shares of Common Stock in exchange for the surrender and cancellation of the Alto Warrant.

The Alto Agreement contained a MFN clause, allowing Alto to opt to substitute terms of Warrant Exchange Agreements entered with other warrant holders from the 2017 Offering if Alto deemed those terms more favorable. Pursuant to this MFN clause, effective as of February 13, 2018, shares previously issued to Alto under the Alto Agreement were returned/cancelled and the Alto Agreement was deemed modified as follows: Pursuant to the Alto Agreement, in exchange for the surrender and cancellation of the Alto Warrants, the Company issued to Alto a convertible promissory note in the aggregate principal amount of \$249,600.00 (the “Alto Note”). The Alto Note accrues interest on the outstanding principal amount at a rate of 5.0% per annum and the entire principal and accrued interest is due and payable on August 13, 2018. The interest rate increases to 18% per annum during a period in which there is an “event of default” under the Alto Note. The holder has the right, from time to time after April 30, 2018, to convert the outstanding principal and accrued interest into shares of Common Stock at the Conversion Price provided that Alto may not affect any such conversions to the extent it would beneficially own in excess of 9.99% of the Company’s outstanding Common Stock. At any time after an event of default has occurred (whether or not the Company has cured such default), Alto may elect to convert the outstanding principal and accrued interest into shares of Common Stock at an alternate conversion price equal to the lower of (i) the Conversion Price then in effect at the time of such conversion, or (ii) 70% of the lowest volume-weighted average price of the Common Stock on a trading day during the 10-trading period prior to such conversion. For purposes of the Alto Note, an “event of default” is deemed to have occurred upon (A) the suspension of trading of the Common Stock on the Nasdaq Capital Market for a period of five consecutive trading days, (B) the Company’s failure to timely deliver shares of Common Stock upon a conversion within five trading days of the applicable conversion date or upon the Company’s notice that it does not intend to comply a request by Empery to convert, (C) the Company’s or any of its subsidiaries’ failure to timely pay any amount due under the Alto Note or the Alto Agreement, (D) the Company’s bankruptcy, insolvency, liquidation, or similar proceeding, or (E) a breach by the Company of any representation, warranty or covenant contained in the Alto Note or the Alto Agreement that remains uncured for a period of three consecutive trading days. On April 2, 2018, the Company and Alto mutually agreed to waive the April 30, 2018 start date for the conversion right of the Alto Note, and Alto converted the entire outstanding balance of principal and interest on the Alto Note into 35,998 shares of Company’s Common Stock. As a result, the Alto Note is fully paid.

On February 14, 2018, the Company entered into a warrant exchange agreement (the “Lincoln Park Agreement”) with Lincoln Park Capital Fund LLC (“Lincoln Park”). The Company previously issued to Lincoln Park a warrant to purchase 8,333 shares (on a post-reverse split basis) of Common Stock (the “Lincoln Park Warrant”) in the 2017 Offering. Pursuant to the Lincoln Park Agreement, on February 19, 2018, the Company issued to Lincoln Park Capital 3,421 shares of Common Stock in exchange for the surrender and cancellation of the Lincoln Park Warrant.

On February 22, 2018, the Company entered into a warrant exchange agreement (the “Empery Agreement”) with Empery Asset Master Ltd., Empery Tax Efficient, LP and Empery Tax Efficient II, LP (collectively, “Empery”). The Company had previously issued to Empery warrants to purchase an aggregate of 26,668 shares (on a post-reverse split basis) (the “Empery Warrants”) of its common stock, par value \$0.0001 per share (the “Common Stock”) pursuant to the registered offering described in the Company’s prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b)(5) under the Securities Act of 1933 on February 9, 2017 (the “2017 Offering” and the warrants issued in such offering, the “2017 Warrants”). Pursuant to the Empery Agreement, in exchange for the surrender and cancellation of the Empery Warrants, the Company issued to Empery convertible promissory notes in the aggregate principal amount of \$64,403.12 (the “Empery Notes”). The Empery Agreement also provides that if the Company enters into an agreement with a holder of the 2017 Warrants that provides for the exchange of such warrants on terms more favorable than those contained in the Empery Agreement, including without limitation, with respect to ratio of any cash paid, or principal amount of notes or value of Common Stock paid in exchange for such warrants, then the Company is to provide notice to Empery within one trading day of such agreement and the terms of the Empery Agreement will be deemed to have been modified in an economically and legally equivalent manner such that Empery would receive the benefit of such more favorable terms, unless Empery elects not to accept such terms by a notice delivered to the Company within 10 trading days.

The Empery Notes accrue interest on the outstanding principal amount at a rate of 4.75% per annum and the entire principal and accrued interest is due and payable on August 22, 2018. The interest rate increases to 18% per annum during a period in which there is an “event of default” under the Empery Notes. The holder has the right, from time to time after April 30, 2018, to convert the outstanding principal and accrued interest into shares of Common Stock at the Conversion Price, provided that Empery may not affect any such conversions to the extent it would beneficially own in excess of 9.99% of the Company’s outstanding Common Stock. At any time after an event of default has occurred (whether or not the Company has cured such default), Empery may elect to convert the outstanding principal and accrued interest into shares of Common Stock at an alternate conversion price equal to the lower of (i) the Conversion Price then in effect at the time of such conversion, or (ii) 70% of the lowest volume-weighted average price of the Common Stock on a trading day during the 10-trading period prior to such conversion. For purposes of the Empery Notes, an “event of default” is deemed to have occurred upon (A) the suspension of trading of the Common Stock on the Nasdaq Capital Market for a period of five consecutive trading days, (B) the Company’s failure to timely deliver shares of Common Stock upon a conversion within five trading days of the applicable conversion date or upon the Company’s notice that it does not intend to comply a request by Empery to convert, (C) the Company’s or any of its subsidiaries’ failure to timely pay any amount due under the Empery Notes or the Empery Agreement, (D) the Company’s bankruptcy, insolvency, liquidation, or similar proceeding, or (E) a breach by the Company of any representation, warranty or covenant contained in the Empery Notes or the Empery Agreement that remains uncured for a period of three consecutive trading days.

The Company’s entry into each of the warrant exchange agreements were the result of separate private negotiations between the Company and each of the named companies.

On March 7, 2018, the Company entered into a Securities Purchase Agreement with investors, pursuant to which the Company agreed to sell to the Investors, in a private placement pursuant to Rule 4(a)(2) and Regulation S under the Securities Act of 1933, as amended, an aggregate of 10,700 shares of the Company's newly-created non-voting Series A Convertible Preferred, and warrants to acquire an aggregate 1,383,631 shares of the Company's common stock, par value \$0.0001 per share at an aggregate purchase price of \$10,700,000. The Series A Convertible Preferred is initially convertible into 1,844,835 shares of common stock based on an initial conversion price of \$5.80 per share.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

At the first closing of the Series A Convertible Preferred on March 9, 2018, the Company issued an aggregate 5,987 shares of Series A Convertible Preferred and 774,186 Warrants for aggregate gross proceeds of \$5,987,000. The second closing of the remaining 4,713 shares of the Series A Convertible Preferred and 609,445 shares of common stock, for aggregate gross proceeds of \$4,713,000 will occur within five business days of receipt of necessary stockholder approval under the applicable rules and regulations of the Nasdaq Stock Market LLC. Under the Series A Convertible Preferred, the Company is obligated to seek stockholder approval no later than May 7, 2018 (within 60 days of the date of the Series A Convertible Preferred), and will file proxy materials with the U.S. Securities and Exchange Commission in connection therewith.

The Company's directors, executive officers and beneficial owners of more than 10% of the Company's common stock, who collectively hold more than 50% of the Company's outstanding voting power, entered into voting agreements dated March 9, 2018, pursuant to which they agreed to vote in favor of any resolution presented to the stockholders of the Company to approve the issuance, in the aggregate, of greater than 19.99% of the common stock outstanding prior to the entry into the Series A Convertible Preferred, for less than the greater of the book or market value of the common stock as required by the listing rules of The Nasdaq Stock Market. In addition, such persons also entered into lock-up agreements pursuant to which they agreed to refrain from certain transactions in the Company's equity securities until the earlier of (i) September 9, 2018 (the six month anniversary of the first closing) and (ii) the initial closing date of a Qualified Offering (as such term is defined in the purchase agreement). Under the Series A Convertible Preferred, the Company also agreed to refrain from issuing, or entering into any agreement to issue, or announcing the issuance or proposed issuance of any shares of common stock or common stock equivalents (subject to certain exclusions) prior to obtaining such stockholder approval.

Qualified Offering is defined in the purchase agreement and the Certificate of Designation (as defined below) as a public offering raising aggregate gross proceeds of no less than \$20.0 million. In the event of a Qualified Offering, under the Series A Convertible Preferred, investors have the right to acquire the securities sold in such Qualified Offering by converting their shares of Series A Convertible Preferred into the same securities on a \$1.00 for \$1.00 basis based on the stated value of their shares of Series A Convertible Preferred.

Series A Convertible Preferred: On March 8, 2018, the Company filed a Certificate of Designation of Preferences, Rights and Limitations of Series A 20% Convertible Preferred Stock (the "Certificate of Designation") with the Secretary of State of the State of Delaware, which designated up to 17,500 shares of Series A Convertible Preferred. The shares of Series A Convertible Preferred have a stated value equal to \$1,000 and bear cumulative dividends, payable in cash or shares of common stock at the Company's option, at a rate of 20% per annum, payable semiannually in arrears on June 30 and December 31, beginning on the first such date after issuance, and upon conversion if accrued and unpaid at such time. Such dividends cease to accrue upon the consummation of a Qualified Offering.

Shares of Series A Convertible Preferred are convertible into common stock at the option the holder from time to time. Prior to receipt of stockholder approval, such conversion is limited to an Investor's *pro rata* share of the aggregate 19.99% limit under applicable Nasdaq rules and regulations. Following receipt of stockholder approval, conversion is subject to a beneficial ownership limitation of 4.99% (or 9.99% at the option of the Investor).

The initial conversion price is \$5.80 per share of common stock, subject to standard adjustments for certain transactions affecting the Company's securities (such as stock dividends, stock splits, and the like). Until consummation of a Qualified Offering, such conversion price is also subject to anti-dilution price protection in the event of non-exempt equity issuances at a price per share lower than the then applicable conversion price. If the Company has not consummated a Qualified Offering (as defined in the Certificate of Designation) on or before September 9, 2018 (the six month anniversary of the first closing), on each of the six month anniversary of the first and the second closings, the Conversion Price shall be reduced to the lesser of (x) the then applicable Conversion Price, as adjusted, (y) \$3.00 (subject to adjustment for forward and reverse stock splits and the like) and (z) the lowest VWAP for any trading day during the five trading days immediately following each such adjustment date.

SELLAS LIFE SCIENCES GROUP, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – Continued

The Series A Convertible Preferred generally have no voting rights. However, for so long as any shares of Series A Convertible Preferred are outstanding, the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Convertible Preferred is required to: (a) alter or change adversely the powers, preferences or rights given to the Series A Convertible Preferred or alter or amend the Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Liquidation (as defined in the Certificate of Designation) senior to, or otherwise *pari passu* with, the Series A Convertible Preferred (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A Convertible Preferred, (d) increase the number of authorized shares of Series A Convertible Preferred, or (e) enter into any agreement with respect to any of the foregoing.

Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary that is not a Fundamental Transaction (as defined in the Certificate of Designation), the holders of Series A Convertible Preferred are entitled to receive out of the assets the Company the same amount they would have received on an as converted basis, disregarding any conversion limitations. Such amounts are paid on a *pari passu* basis with all holders of Common Stock.

Warrants: Under the Purchase Agreement, the Company agreed to issue Warrants to acquire an aggregate of 1,383,631 shares of Common Stock, or approximately 75% of the shares of Common Stock into which the Series A Convertible Preferred are initially exercisable. The Warrants have an initial exercise price of \$6.59 per share, subject to adjustment in certain circumstances, may not be exercised until the date that is six months after issuance, and have a term of five years from the initial exercise date. Prior to receipt of stockholder approval, exercise of the Warrants is limited to an Investor's pro rata share of the aggregate 19.99% limit under applicable Nasdaq rules and regulations. Exercise is also subject to a beneficial ownership limitation of 4.99% (or 9.99% at the option of the Investor).

Placement Agent: Cantor Fitzgerald & Co. ("Cantor") acted as placement agent pursuant to an engagement letter dated January 16, 2018 (the "Engagement Letter"). Under the engagement letter, the Company agreed to pay Cantor a fee equal to 7% of the gross proceeds received by the Company from United States based Investors. The Company also agreed to reimburse Cantor for its actual, out-of-pocket accountable expenses (including legal fees and expenses) incurred in connection with the Private Placement.

Neuvax Phase 2b Clinical Trial

On April 2, 2018 and in connection with the Company's single-blinded, controlled Phase 2b independent investigator-sponsored clinical trial of Herceptin: Genentech/Roche) +/- NeuVax in HER2 1+/2+ breast cancer patients, we announced the interim efficacy analysis, conducted by an independent Data Safety Monitoring Board of the efficacy and safety data for the study in an overall population of 275 patients as well as the two primary study target patient populations (node-positive and triple negative breast cancer ("TNBC")) after a median follow-up of 19 months, demonstrated a clinically meaningful difference in median disease-free survival in favor of the active arm (NeuVax + Herceptin), a primary endpoint of the study, with hazard ratios of 0.67 and 0.61 in the intent to treat and modified intent to treat populations (i.e., those who received at least one dose of vaccine or control) as well as a 34.9% and 39.5% reduction in relative risk of recurrence in the active versus control arms in the intent to treat and modified intent to treat populations, respectively. A clinically meaningful and also statistically significant difference was found between the two arms in the cohort of patients (n= 98) with TNBC, with a hazard ratio of 0.26 and a p-value of 0.023 in favor of the NeuVax + Herceptin combination. Similarly, a clinically meaningful and statistically significant difference was found between the two arms in favor of the combination in the cohort of patients not receiving hormonal therapy (n = 110), with a hazard ratio of 0.24 and a p-value of 0.009. This pre-specified interim analysis also showed an adverse event profile with no notable differences between treatment arms. This analysis confirmed the 2016 data showing that the addition of NeuVax to Herceptin did not result in any additional cardiotoxicity compared to Herceptin alone. Based on these results, and the independent Data Safety Monitoring Board's recommendation, the Company plans to expeditiously seek regulatory guidance by the FDA for further development of the combination of NeuVax + Herceptin in TNBC, considering the statistically significant benefit of the combination therapy seen in this population with large unmet medical need.

JGB Action

On or about April 9, 2018, JGB filed a lawsuit in the U.S. District Court for the Southern District of New York captioned *JGB (Cayman) Newton, Ltd. v. Sellas Life Sciences Group, Inc., et al.*, Case 1:18-cv-3095 (DLC), or the JGB Action. The complaint in the JGB Action asserts claims under state law and federal securities law against the Company, the Company's Chief Executive Officer, Dr. Stergiou and Angelos M. Stergiou, M.D., ScD H.C, and the Company's Interim Chief Financial Officer, Aleksey N. Krylov (Mr. Krylov together with the Company and Dr. Stergiou, the "Defendants"). The complaint in the JGB Action alleges, among other things, that we breached a contractual obligation to deliver certain shares of the Company's common stock to JGB and that, in the course of negotiations related to the senior secured debenture agreement, the Defendants failed to disclose to JGB certain information regarding positive clinical trial results that was not then public. According to the complaint, JGB seeks to receive 2,483,500 shares of the Company's common stock, damages, and costs and expenses incurred in the JGB action, among other things. The Company disputes the claims in the JGB Action and intends to defend against them vigorously. The Company has retained the law firm Skadden, Arps, Slate, Meagher & Flom LLP, as its defense counsel for the JGB Action.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Based on the evaluation of our disclosure controls and procedures (as defined in the Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, or the Exchange Act) required by Exchange Act Rules 13a-15(b) or 15d-15(b), our principal executive officer and our interim principal financial officer have concluded that as of the end of the period covered by this report, our disclosure controls and procedures were not effective as a result of the material weakness in our internal control over financial reporting discussed below.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. We maintain a system of internal control that is designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Notwithstanding that we do not qualify for the relief afforded by Instruction 1 to Item 308 of Regulation S-K to newly public companies, management has not assessed nor attested to our internal control over financial reporting as is set forth in Item 308 of Regulation S-K promulgated under the Securities Exchange Act 1934, as amended, and Section 404 of the Sarbanes-Oxley Act as of December 31, 2017, the end of our last fiscal year. We will do so initially as of December 31, 2018.

We were unable to conduct the required assessment primarily due to the Merger occurring on December 29, 2017 and the resulting substantial change in operational focus, management and the internal control environment. Following the Merger, Private SELLAS historical operations, and not that of our Company, represent virtually the entirety of the combined business. In addition, following the Merger our accounting and financial systems, as well as personnel, were replaced by those of Private SELLAS. Due to the extensive changes to our internal control environment, it was impractical for us to develop, implement, and assess our system of internal control, and conduct management's assessment of internal control over financial reporting as of December 31, 2017.

Material Weakness and Remediation Plan

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

We were informed by our independent registered public accounting firm that we had a material weakness in our internal control over financial reporting due to our lack of sufficient management and personnel with appropriate expertise in GAAP and SEC rules and regulations with respect to financial reporting during the year ending December 31, 2017. At that time, we had only one designated finance and accounting employee and relied primarily on consultants to provide many accounting, book-keeping and administrative services.

As of December 30, 2017, we hired three additional finance and accounting personnel to build out our financial reporting team and further develop and document accounting policies and procedures. During the first quarter of 2018, we engaged a consulting firm to assist us in evaluating the design of our internal controls, including disclosure controls and procedures. Our goal is to remediate this material weakness as soon as practical as part of our plan to implement and mature our system of internal control. We will complete our annual assessment of internal control over financial reporting as of period ending December 31, 2018.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated herein by reference to the information to be contained in the Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information to be contained in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference to the information to be contained in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the information to be contained in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information to be contained in the Proxy Statement.

[Table of Contents](#)

ITEM 15. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>	<u>Registrant's Form</u>	<u>Incorporated by Reference</u> <u>Date Filed with the SEC</u>	<u>Exhibit Number</u>
2.1 [^]	Agreement and Plan of Merger, dated as of August 7, 2017, by and among the Registrant, Galena Bermuda Merger Sub, Ltd., Sellas Intermediate Holdings I, Inc., Sellas Intermediate Holdings II, Inc. and SELLAS Life Sciences Group Ltd, as amended (included as Annex A to the proxy statement/prospectus/consent solicitation statement)	424B	November 8, 2017	Annex A
3.1	Composite Amended and Restated Certificate of Incorporation of the Registrant (formerly, Galena Biopharma, Inc.), amended as of December 27, 2017			
3.2	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock	8-K	March 12, 2018	3.1
3.3	Amended and Restated By-Laws of the Registrant	8-K	January 5, 2018	3.3
4.1	Form of Common Stock Certificate			
10.1*	The Registrant's 2016 Incentive Plan effective as of July 14, 2016	8-K	August 22, 2016	10.3
10.2*	Form Incentive Stock Option granted under the Registrant's 2016 Incentive Plan			
10.3*	Form Nonstatutory Stock Option granted under the Registrant's 2016 Incentive Plan			
10.4*	SELLAS Life Sciences Group, Ltd Stock Incentive Plan #1	S-4/A	October 30, 2017	10.61
10.5*	SELLAS Life Sciences Group Ltd Notice of Grant of Restricted Stock Units	S-4/A	October 30, 2017	10.63
10.6*	2017 Equity Incentive Plan of the Registrant	8-K	January 5, 2018	10.10
10.7*	2017 Employee Stock Purchase Plan of the Registrant	8-K	January 5, 2018	10.11
10.8*	Form of Stock Option Grant Notice and Option Agreement under the 2017 Equity Incentive Plan	8-K	March 19, 2018	10.2
10.9*	Form of Restricted Stock Unit Grant under the 2017 Equity Incentive Plan			
10.10*	Employment Agreement by and between SELLAS Life Sciences Group AG and Angelos Stergiou, effective September 1, 2016	S-4/A	October 30, 2017	10.53
10.11*	Employment Agreement by and between SELLAS Life Sciences Group AG and Gregory Torre, effective September 1, 2016	S-4/A	October 30, 2017	10.54
10.12*	Employment Agreement by and between SELLAS Life Sciences Group AG and Nicholas Sarlis, effective September 19, 2016	S-4/A	October 30, 2017	
10.13*	Retention Agreement Letter by and between SELLAS Life Sciences Group Ltd and Gregory Torre, dated July 31, 2017	S-4/A	October 30, 2017	10.57

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	<u>Exhibit Number</u>
10.14*	Retention Agreement Letter by and between SELLAS Life Sciences Group Ltd and Nicholas Sarlis, dated August 2, 2017	S-4/A	October 30, 2017	10.58
10.15*	Employment Agreement by and between SELLAS Life Sciences Group Ltd and Aleksey Krylov, dated October 24, 2017	S-4/A	October 30, 2017	10.56
10.16*	Letter Employment Agreement by and between SELLAS Life Sciences Group, Inc. and Barbara Wood, dated March 14, 2018	8-K	March 19, 2018	10.1
10.17*	Amendment, dated December 31, 2015, to Employment Offer Letter effective June 25, 2015, between Galena Biopharma, Inc. and Thomas J. Knapp	10-K	March 10, 2016	10.38
10.18*	Second Amendment to Offer Letter between Galena Biopharma, Inc. and Thomas J. Knapp	8-K	October 6, 2016	10.1
10.19*	Third Amendment to Offer Letter between Galena Biopharma, Inc. and Thomas J. Knapp, dated as of January 31, 2017	8-K	February 7, 2017	10.2
10.20*	Retention Agreement between Thomas J. Knapp and Galena Biopharma, Inc. dated February 23, 2017	10-Q	May 10, 2017	10.6
10.21*	Separation Agreement and General Release between Mark W. Schwartz and Galena Biopharma, Inc. executed on January 31, 2017	10-Q	May 10, 2017	10.1
10.22*	Employment Agreement between Galena Biopharma, Inc. and Stephen Ghiglieri dated November 1, 2016	8-K	November 3, 2016	99.2
10.22*	First Amendment to Employment Agreement between Galena Biopharma, Inc. and Stephen Ghiglieri, dated as of February 21, 2017	8-K	February 21, 2017	10.1
10.23*	Retention Agreement between Stephen Ghiglieri and Galena Biopharma, Inc. dated February 23, 2017	10-Q	May 10, 2017	10.3
10.24*	Second Amendment to Employment Agreement, dated as of August 22, 2016, between Galena Biopharma, Inc. and Bijan Nejadnik	8-K	August 22, 2016	10.2
10.25*	Retention Agreement between Bijan Nejadnik and Galena Biopharma, Inc. dated February 23, 2017	10-Q	May 10, 2017	10.4
10.26*	Severance Agreement, dated as of August 22, 2016, between Galena Biopharma, Inc. and John T. Burns	8-K	August 22, 2016	10.1
10.27*	Retention Agreement between John Burns and Galena Biopharma, Inc. dated February 23, 2017	10-Q	May 10, 2017	10.5

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	<u>Exhibit Number</u>
10.28+	Patent and Technology License Agreement, dated September 11, 2006, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.1
10.29	Amendment No. 1 to Patent and Technology License Agreement, dated December 21, 2007, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.2
10.30	Amendment No. 2 to Patent and Technology License Agreement, dated September 3, 2008, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.3
10.31	Amendment No. 3 to Patent and Technology License Agreement, dated July 8, 2009, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.4
10.32+	Amendment No. 4 to Patent and Technology License Agreement, dated February 11, 2010, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.5
10.33+	Amendment No. 5 to Patent and Technology License Agreement, dated January 10, 2011, by and among the Board of Regents of the University of Texas System, the University of Texas M.D. Anderson Cancer Center, the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and Aphera, Inc. (formerly Advanced Peptide Therapeutics, Inc.)	10-Q	August 15, 2011	10.6
10.34	Scientific Advisory Agreement between the Registrant (formerly Galena Biopharma, Inc.) and George E. Peoples, Ph.D., dated April 13, 2011	10-Q	August 15, 2011	10.10
10.35+	Exclusive License Agreement, dated as of July 11, 2011, by and among The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., the Registrant (formerly Galena Biopharma, Inc.) and its wholly owned subsidiary, Aphera, Inc.	10-Q	August 15, 2011	10.12
10.36+	Exclusive License Agreement, dated as of September 16, 2011, by and among The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., The Board of Regents of the University of Texas System, The University of Texas M. D. Anderson Cancer Center and the Registrant (formerly Galena Biopharma, Inc.)	8-K	September 21, 2011	10.1

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	<u>Exhibit Number</u>
10.37	Form of Contingent Value Rights Agreement among the Registrant (formerly RXi Pharmaceuticals Corporation), Computershare Trust Company, N.A., Computershare Inc., and Robert E Kennedy, dated April 13, 2011	8-K	April 14, 2011	10.1
10.38	First Amendment to Contingent Value Rights Agreement among the Registrant (formerly RXi Pharmaceuticals Corporation), Computershare Trust Company, N.A., Computershare Inc., and Robert E Kennedy, dated February 15, 2012	10-K	March 28, 2012	10.2
10.39+	License Agreement, effective as of April 30, 2009, between Kwangdong Pharmaceutical Co., Ltd. and Aphera, Inc.	10-K	March 28, 2012	10.45
10.40	Amendment No. 1 to License Agreement, dated as of January 13, 2012, by and among Aphera, Inc., Kwangdong Pharmaceutical Co., Ltd., and the Registrant	10-K	March 28, 2012	10.46
10.38+	License and Supply Agreement, effective December 3, 2012, by and between the Registrant and ABIC Marketing Limited, a subsidiary of Teva Pharmaceuticals	10-K	March 12, 2013	10.43
10.39	At Market Issuance Sales Agreement dated May 24, 2013 between the Registrant and Maxim Group LLC	Form S-3	May 24, 2013	1.3
10.40	At Market Issuance Sales agreements dated May 24, 2013 between the Registrant and FBR & Co. formerly known as MLV & Co. LLC	Form S-3	May 24, 2013	1.2
10.41+	License and Development Agreement, dated January 13, 2014, between the Registrant and Dr. Reddy's Laboratories, Ltd.	10-K	March 17, 2014	10.36
10.42+	Exclusive License Agreement, dated as of December 20, 2013, between Mills Pharmaceuticals, LLC and BioVascular, Inc.	10-K	March 17, 2014	10.37
10.43	Amendment of the Exclusive License Agreement by and between Mills Pharmaceuticals, LLC and BioVascular, Inc.	8-K	September 11, 2017	10.1
10.44	Amendment dated August 8, 2016 to the Purchase Agreement, dated as of November 18, 2014, by and between Galena Biopharma, Inc. and Lincoln Park Capital Fund, LLC	10-Q	November 9, 2016	10.2
10.45	Second Amendment to the Purchase Agreement, dated as of February 6, 2017, by and between Galena Biopharma, Inc. and Lincoln Park Capital Fund, LLC	8-K	February 7, 2017	10.1
10.46	License Agreement by and between SELLAS Life Sciences, Inc. and Madison Avenue Suites LLC, dated March 20, 2017	Form S-4/A	October 30, 2017	10.64
10.47+	Amended and Restated Exclusive License Agreement by and between SELLAS Life Sciences Group Ltd and Memorial Sloan Kettering Cancer Center, effective October 11, 2017	Form S-4/A	October 30, 2017	10.65

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	<u>Exhibit Number</u>
10.48	Securities Purchase Agreement dated May 10, 2016 between the Registrant and Purchasers	10-Q	May 10, 2016	10.1
10.49	Registration Rights Agreement dated May 10, 2016 between the Registrant and Purchasers	10-Q	May 10, 2016	10.3
10.50	Series A Common Stock Purchase Warrant assigned to JGB (Cayman) Newton Ltd.	10-Q	May 10, 2016	4.2
10.51	Series B Common Stock Purchase Warrant assigned to JGB (Cayman) Newton Ltd.	10-Q	May 10, 2016	4.3
10.52	Subsidiary Guarantee dated May 10, 2016 between the Registrant and JGB Collateral LLC	10-Q	May 10, 2016	10.2
10.53	Security Agreement dated May 10, 2016 between the Registrant and JGB Collateral LLC	10-Q	May 10, 2016	10.4
10.54	Amendment Agreement between the Registrant and JGB (Cayman) Newton Ltd. dated August 22, 2016	8-K	August 23, 2016	10.1
10.55	Amended and Restated 9% Original Issue Discount Senior Secured Debenture Due November 10, 2018, issued to JGB (Cayman) Newton Ltd. as of August 22, 2016	8-K	August 23, 2016	4.1
10.56	Waiver dated December 14, 2016 to the Securities Purchase Agreement, dated as of May 10, 2016 by and between the Registrant and JGB Newton, Ltd	8-K	February 7, 2017	10.3
10.57	Waiver dated April 1, 2017 to the Securities Purchase Agreement, dated as of May 10, 2016 by and between the Registrant and JGB Newton, Ltd.	8-K	April 3, 2017	10.1
10.58	Amendment Agreement dated May 1, 2017 between the Registrant and JGB (Cayman) Newton Ltd.	8-K	May 2, 2017	10.1
10.59	Amendment Agreement, dated as of July 10, 2017, by and between JGB Cayman (Newton) Ltd. and the Registrant with respect to the 9% Original Issue Discount Senior Secured Convertible Debenture in the Original Issue Amount of \$25,350,000 Issued and Sold to JGB Cayman (Newton) Ltd. by the Registrant	8-K	July 11, 2017	4.1
10.60	Consent, dated as of August 7, 2017, made by JGB (Cayman) Newton Ltd., in favor of the Registrant	8-K	August 8, 2017	10.3

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		<u>Exhibit Number</u>
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	
10.63	Form of warrants granted on May 8, 2013 under the Loan and Security Agreement	10-Q	May 9, 2013	10.7
10.64	Form of Warrant Agreement by and among the Registrant, Computershare Inc. and Computershare Trust Company, N.A.	8-K	September 18, 2013	4.1
10.65	Warrant Agreement, dated as of March 18, 2015, by and among the Registrant, Computershare, Inc. and Computershare Trust Company, N.A.	10-Q	August 6, 2015	4.1
10.66	Form of Warrant Agreement by and among the Registrant, Computershare Inc. and Computershare Trust Company, N.A.	8-K	January 7, 2016	4.1
10.67	Form of Warrant, issued by the Registrant to the Investors on July 13, 2016	8-K	July 8, 2016	4.1
10.68	Form of Warrant Agreement, including the Form of Warrant, issued by the Registrant to the Investors on February 13, 2017	8-K	February 10, 2017	4.1
10.69	Form of Support Agreement, by and between the Registrant and certain directors, officers and shareholders of SELLAS Life Sciences Group Ltd	8-K	August 8, 2017	10.2
10.70	Form of Support Agreement, by and between SELLAS Life Sciences Group Ltd and certain directors, officers and stockholders of the Registrant	8-K	August 8, 2017	10.1
10.71	Warrant issued to EQC Private Markets SAC Fund Ltd – EQC Biotech Sely I Fund	8-K	January 5, 2018	10.5
10.72	Form of Indemnity Agreement between the Registrant and each of its directors and executive officers	8-K	January 5, 2018	10.8
10.73	Warrant Exchange Agreement by and between the Registrant and CVI Investments, Inc., dated February 6, 2018			
10.74	Promissory Note by and between the Registrant and CVI Investments, Inc., dated February 6, 2018			
10.75	Warrant Exchange Agreement by and between the Registrant and Anson Investments Master Fund LP, dated February 7, 2018			
10.76	Warrant Exchange Agreement by and between the Registrant, Sabby Healthcare Master Fund Ltd and Sabby Volatility Warrant Master Fund Ltd, dated February 8, 2018			

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		<u>Exhibit Number</u>
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	
10.77	Warrant Exchange Agreement by and between the Registrant and Hudson Bay Master Fund Agreement, dated February 9, 2018			
10.78	Promissory Note by and between the Registrant and Hudson Bay Master Fund Agreement, dated February 9, 2018			
10.79	Warrant Exchange Agreement by and between the Registrant and Alto Opportunity Master Fund, SPC—Segregated Master Portfolio B, dated February 13, 2018			
10.80	Promissory Note by and between the Registrant and Alto Opportunity Master Fund, SPC—Segregated Master Portfolio B, dated February 13, 2018			
10.81	Warrant Exchange Agreement by and between the Registrant and Lincoln Park Capital LLC, dated February 14, 2018			
10.82	Warrant Exchange Agreement by and between the Registrant and Empery Asset Master, Ltd., dated February 21, 2018			
10.83	Warrant Exchange Agreement by and between the Registrant and Empery Tax Efficient, LP, dated February 21, 2018			
10.84	Warrant Exchange Agreement by and between the Registrant and Empery Tax Efficient II, LP, dated February 21, 2018			
10.85	Promissory Note by and between the Registrant and Empery Asset Master, Ltd., dated February 21, 2018			
10.86	Promissory Note by and between the Registrant and Empery Tax Efficient, LP, dated February 21, 2018			
10.87	Promissory Note by and between the Registrant and Empery Tax Efficient II, LP, dated February 21, 2018			
10.88	Securities Purchase Agreement dated March 7, 2018 by and between the Registrant and certain investors	8-K	March 12, 2018	10.1
10.89	Form of Voting Agreement by and between the Registrant and its named executives, Board of Directors and certain stockholders	8-K	March 12, 2018	10.2
10.90	Form of Lock-Up Agreement by and between the Registrant and its named executives, Board of Directors and certain stockholders	8-K	March 12, 2018	10.3
10.91	Form of Warrant issued pursuant to that certain Securities Purchase Agreement dated March 7, 2018 by and between the Registrant and the certain investors	8-K	March 12, 2018	4.1

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Description</u>	<u>Incorporated by Reference</u>		<u>Exhibit Number</u>
		<u>Registrant's Form</u>	<u>Date Filed with the SEC</u>	
14.1	Code of Business Conduct and Ethics	8-K	January 5, 2018	14.1
16.1	Letter from KPMG Audit Limited dated April 12, 2018, regarding change in certifying accountant.	8-K/A	April 13, 2018	16.1
21.1	Subsidiaries of the Registrant			
23.1	Consent of Moss Adams LLP, Independent Registered Public Accounting Firm to the Registrant			
23.2	Consent of KPMG Audited Limited, Independent Registered Public Accounting Firm to SELLAS Life Sciences Group Ltd			
24.1	Powers of Attorney (included on signature page hereto)			
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.			
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.			
32.1**	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			
101.INS***	XBRL Instance Document			
101.SCH***	XBRL Taxonomy Extension Schema			
101.CAL***	XBRL Taxonomy Extension Calculation Linkbase Document			
101.DEF***	XBRL Taxonomy Extension Definition Linkbase Document			
101.LAB***	XBRL Taxonomy Extension Label Linkbase Document			
101.PRE***	XBRL Taxonomy Extension Presentation Linkbase Document			

* Indicates management contract or compensatory plans or arrangements.

** The certifications attached as Exhibit 32.1 accompany this Annual Report on Form 10-K pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed “filed” by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

^ The schedules and exhibits to this exhibit have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

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

*** In accordance with Rule 406T of Regulation S-T, the Interactive Data Files in Exhibit 101 are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.

ITEM 16. FORM 10-K SUMMARY

Not Applicable.

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, on April 13, 2018.

Date: April 13, 2018

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos M. Stergiou

Angelos M. Stergiou, MD, ScD h.c.
President and Chief Executive Officer

[Table of Contents](#)

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David Moser and YiYi Lam, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this annual report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Angelos M. Stergiou</u> Angelos M. Stergiou, MD, ScD h.c.	President, Chief Executive Officer (Principal Executive Officer) and Director	April 13, 2018
<u>/s/ Aleksey Krylov</u> Aleksey Krylov, CFA	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	April 13, 2018
<u>/s/ Jane Wasman</u> Jane Wasman	Chairman of the Board	April 13, 2018
<u>/s/ Fabio Lopez</u> Fabio Lopez	Director	April 13, 2018
<u>/s/ Robert Van Nostrand</u> Robert Van Nostrand	Director	April 13, 2018
<u>/s/ David Scheinberg</u> David Scheinberg, M.D., PhD.	Director	April 13, 2018
<u>/s/ John Varian</u> John Varian	Director	April 13, 2018
<u>/s/ Stephen F. Ghiglieri</u> Stephen F. Ghiglieri	Director	April 13, 2018

Delaware
The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OR A MERGER WITH A RESTATED CERTIFICATE ATTACHED OF "SELLAS LIFE SCIENCES GROUP, INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, FILED THE SIXTH DAY OF FEBRUARY, A.D. 2008, AT 4:40 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE TWENTY-SIXTH DAY OF JULY, A.D. 2011, AT 4:08 O'CLOCK P.M.

CERTIFICATE OF OWNERSHIP, CHANGING ITS NAME FROM "RXI PHARMACEUTICALS CORPORATION" TO "GALENA BIOPHARMA, INC.", FILED THE TWENTY-SIXTH DAY OF SEPTEMBER, A.D. 2011, AT 10:28 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE TWENTY-EIGHTH DAY OF JUNE, A.D. 2013, AT 4:56 O'CLOCK P.M.



A handwritten signature in black ink, appearing to read "J. Bullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

4136433 8100X
SR# 20182068968

Authentication: 202360615
Date: 03-20-18

You may verify this certificate online at corp.delaware.gov/authver.shtml

Delaware
The First State

CERTIFICATE OF CHANGE OF REGISTERED AGENT, FILED THE TWENTY-SECOND DAY OF JULY, A.D. 2013, AT 9:13 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE NINETEENTH DAY OF JUNE, A.D. 2015, AT 2:23 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE SEVENTEENTH DAY OF OCTOBER, A.D. 2016, AT 10 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE SECOND DAY OF NOVEMBER, A.D. 2016, AT 10 O'CLOCK A.M.

CERTIFICATE OF VALIDATION, FILED THE SIXTH DAY OF JULY, A.D. 2017, AT 1:43 O'CLOCK P.M.

CERTIFICATE OF VALIDATION, FILED THE SIXTH DAY OF JULY, A.D. 2017, AT 1:44 O'CLOCK P.M.

CERTIFICATE OF VALIDATION, FILED THE SIXTH DAY OF JULY, A.D. 2017, AT 1:45 O'CLOCK P.M.

CERTIFICATE OF VALIDATION, FILED THE SIXTH DAY OF JULY, A.D. 2017, AT 1:46 O'CLOCK P.M.

CERTIFICATE OF VALIDATION, FILED THE SIXTH DAY OF JULY, A.D. 2017, AT 1:47 O'CLOCK P.M.



A handwritten signature in black ink, appearing to read "JBullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed in a small font.

4136433 8100X
SR# 20182068968

Authentication: 202360615
Date: 03-20-18

You may verify this certificate online at corp.delaware.gov/authver.shtml

Delaware
The First State

CERTIFICATE OF AMENDMENT, FILED THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2017, AT 9:30 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2017 AT 4:15 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "GALENA BIOPHARMA, INC." TO "SELLAS LIFE SCIENCES GROUP, INC.", FILED THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2017, AT 11 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2017 AT 4:45 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE EIGHTH DAY OF MARCH, A.D. 2018, AT 4:26 O'CLOCK P.M.



A handwritten signature in black ink, appearing to read "JBullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

4136433 8100X
SR# 20182068968

Authentication: 202360615
Date: 03-20-18

You may verify this certificate online at corp.delaware.gov/authver.shtml

*State of Delaware
Secretary of State
Division of Corporations
Delivered 04:49 PM 02/06/2008
FILED 04:40 PM 02/06/2008
SRV 080127383 - 4136433 FILE*

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
RXI PHARMACEUTICALS CORPORATION
a Delaware Corporation**

RXi Pharmaceuticals Corporation, a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby submit this Amended and Restated Certificate of Incorporation, duly adopted pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware, for the purpose of amending and restating the Certificate of Incorporation of the Corporation, as originally filed with the Secretary of State of the State of Delaware on April 3, 2006 and as subsequently amended on November 28, 2006, January 8, 2007 and June 19, 2007. The text of the Certificate of Incorporation is hereby restated and amended to read in its entirety as follows:

ARTICLE I

The name of this corporation is RXi Pharmaceuticals Corporation.

ARTICLE II

The nature of the business and the purposes to be conducted and promoted by the Corporation shall be to conduct any lawful business, to promote any lawful purpose, and to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "DGCL").

ARTICLE III

A. Classes of Stock. This corporation is authorized to issue 55,000,000 shares. 50,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("Preferred Stock").

B. Rights, Preferences, Privileges and Restrictions of Preferred Stock. Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation (the "Board of Directors") as hereinafter provided. Any shares of Preferred Stock that may be redeemed, purchased or acquired by the Corporation may be reissued except as otherwise provided by law or this Certificate of Incorporation. Different series of Preferred Stock shall not be construed to constitute different classes of shares for the purposes of voting by classes unless expressly provided in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors as hereinafter provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by resolution or resolutions providing for the issue of the shares thereof, to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof,

including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the DGCL. Without limiting the generality of the foregoing, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to the Preferred Stock of any other series to the extent permitted by law and this Certificate of Incorporation. Except as otherwise provided in this Certificate of Incorporation, no vote of the holders of the Preferred Stock or Common Stock shall be a prerequisite to the designation or issuance of any shares of any series of the Preferred Stock authorized by and complying with the conditions of this Certificate of Incorporation, the right to have such vote being expressly waived by all present and future holders of the capital stock of the Corporation.

C. Common Stock. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon issuance of any such Preferred Stock. The holders of the Common Stock shall have no preemptive rights to subscribe for any shares of any class of stock of the Corporation whether now or hereafter authorized.

1. Dividend Rights. Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend rights of any then outstanding Preferred Stock.
2. Liquidation Rights. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential rights of any then outstanding Preferred Stock.
3. Redemption. The Common Stock is not redeemable.
4. Voting Rights. Each share of Common Stock shall be entitled to one vote. There shall be no cumulative voting.
5. Number. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the DGCL.

ARTICLE IV

The corporation is to have perpetual existence.

ARTICLE V

Except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation or with respect to any acts or omissions of such director occurring prior to such amendment or repeal.

ARTICLE VI

The corporation shall, to the fullest extent permitted by the provisions of Section 145 of the General Corporation Law of the State of Delaware, as the same may be amended and supplemented, indemnify any and all persons whom it shall have power to indemnify under said Section from and against any and all of the expenses, liabilities, or other matters referred to in or covered by said section, and the indemnification provided for herein shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any Bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such person.

ARTICLE VII

A. Indemnification. The Corporation shall, to the maximum extent permitted under the DGCL and except as set forth below, indemnify and upon request advance expenses to each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, including any employee benefit plan (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Notwithstanding anything to the contrary in this Article, the Corporation shall not indemnify an Indemnitee seeking indemnification in connection with any action, suit, proceeding, claim or counterclaim, or part thereof, initiated by the Indemnitee unless the initiation thereof was approved by the Board of Directors.

B. Determination of Entitlement to Indemnification. Any indemnification under Paragraph A of this Article (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification is proper in the circumstances because such person has either met the applicable standard of conduct set forth in this Article and that the amount requested has been actually and reasonably incurred. Such determination shall be made:

1. by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum; or

2. by a committee of such directors designated by a majority vote of such directors, even though less than a quorum; or
3. if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion; or
4. by the holders of the Common Stock.

C. Advance of Expenses. Notwithstanding any other provisions of this Certificate of Incorporation, the By-Laws of the Corporation, or any agreement, vote of stockholders or disinterested directors, or arrangement to the contrary, the Corporation may advance payment of expenses incurred by an Indemnitee in advance of the final disposition of any matter only to the extent such advance is not prohibited by applicable law, and then only upon receipt of an undertaking by or on behalf of the Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that the Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article. Such undertaking may be accepted without reference to the financial ability of the Indemnitee to make such repayment.

D. Subsequent Amendment. No amendment, termination or repeal of this Article or of the relevant provisions of the DGCL or any other applicable laws shall affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

E. Other Rights. This corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article.

F. Merger or Consolidation. If the Corporation is merged into or consolidated with another corporation and the Corporation is not the surviving corporation, the surviving corporation shall assume the obligations of the Corporation under this Article with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the date of such merger or consolidation.

G. Savings Clause. If this Article or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any expenses, including attorneys' fees, judgments, fines and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article that shall not have been invalidated and to the fullest extent permitted by applicable law.

H. Scope of Article. Indemnification and advancement of expenses, as authorized by the preceding provisions of this Article, shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office. The indemnification and advancement of expenses provided by or granted pursuant to this Article shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be an authorized representative and shall inure to the benefit of the heirs, executors and administrators of such a person.

I. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, trustee, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, trustee, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against the person and incurred by the person in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article.

ARTICLE VIII

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE IX

This Article is inserted for the management of the business and for the conduct of the affairs of the Corporation.

A. Number of Directors. The Board of Directors shall consist of one or more members, each of whom shall be a natural person. The exact number of directors within the limitations specified in the preceding sentence shall be fixed from time to time by, or in the manner provided in, the By-Laws of the Corporation.

B. Classes of Directors. The Board of Directors shall be and is divided into three classes: Class I, Class II and Class III. No one class shall have more than one director more than any other class. If a fraction is contained in the quotient arrived at by dividing the designated number of directors by three, then, if such fraction is one-third, the extra director shall be a member of Class III, and if such fraction is two-thirds, one of the extra directors shall be a member of Class III and one of the extra directors shall be a member of Class II, unless otherwise provided from time to time by resolution adopted by the Board of Directors.

C. Election of Directors. Elections of directors need not be by written ballot except as and to the extent provided in the By-Laws of the Corporation.

D. Terms of Office. Except as provided in Paragraph G of this Article, each director shall serve for a term ending on the date of the third annual meeting following the annual meeting at which such director was elected; provided, however, that each initial director in Class I shall serve for a term ending on the date of the annual meeting in 2008; each initial director in Class II shall serve for a term ending on the date of the annual meeting in 2009; and each initial director in Class III shall serve for a term ending on the date of the annual meeting in 2010; and provided, further, that the term of each director shall be subject to the election and qualification of his successor and to his earlier death, resignation or removal.

E. Allocation of Directors Among Classes in the Event of Increases or Decreases in the Number of Directors. In the event of any increase or decrease in the authorized number of directors, (i) each director then serving as such shall nevertheless continue as a director of the class of which he is a member and (ii) the newly created or eliminated directorships resulting from such increase or decrease shall be apportioned by the Board of Directors among the three classes of directors so as to ensure that no one class has more than one director more than any other class. To the extent possible, consistent with the foregoing rule, any newly created directorships shall be added to those classes whose terms of office are to expire at the latest dates following such allocation, and any newly eliminated directorships shall be subtracted from those classes whose terms of offices are to expire at the earliest dates following such allocation, unless otherwise provided from time to time by resolution adopted by the Board of Directors.

F. Removal . The directors of the Corporation may be removed only for cause by the affirmative vote of the holders of at least seventy five percent (75%) of the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, cast at a meeting of the stockholders called for that purpose.

G. Vacancies. Any vacancy in the Board of Directors, however occurring, and any newly created directorship resulting from an enlargement of the Board, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office, and a director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next election of the class for which such director shall have been chosen, subject to the election and qualification of his successor and to his earlier death, resignation or removal.

H. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before either an annual or special meeting of stockholders shall be given in the manner provided by the By-Laws of the Corporation.

I. Amendment to Article. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of at least seventy five percent (75%) of the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal, or to adopt any provisions inconsistent with the purpose or intent of this Article IX.

ARTICLE X

Except as otherwise provided in the By-Laws, the stockholders of the Corporation and the Board of Directors may hold their meetings and have an office or offices outside of the State of Delaware and, subject to the provisions of the laws of said State, may keep the books of the corporation outside of said State at such places as may, from time to time, be designated by the Board of Directors or by the By-Laws of the Corporation.

ARTICLE XI

At any time during which a class of capital stock of the Corporation is registered under Section 12 of the Securities Exchange Act of 1934 or any similar successor statute, stockholders of the Corporation may not take any action by written consent in lieu of a meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of at least seventy five percent (75%) of the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal or to adopt any provisions inconsistent with the purpose or intent of this Article XI.

ARTICLE XII

Special meetings of stockholders may be called at any time only by the Chairman of the Board of Directors, the Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the Board of Directors. Any business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-Laws, each as amended, and notwithstanding the fact that a lesser percentage may be specified by law, this Certificate of Incorporation or the By-Laws of the Corporation, the affirmative vote of at least seventy five percent (75%) of the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal or to adopt any provisions inconsistent with the purpose or intent of this Article XII.

ARTICLE XIII

The registered office of the corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle. The name of its registered agent at such office is The Corporation Trust Company.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Incorporation to be signed by its President and Chief Executive Officer on this 5th day of February, 2008.

RXI PHARMACEUTICALS CORPORATION

By: /s/ Tod Woolf

Tod Woolf

President and Chief Executive
Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:08 PM 07/26/2011
FILED 04:08 PM 07/26/2011
SRV 110859225 - 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
RESTATED CERTIFICATE OF INCORPORATION OF
RXi PHARMACEUTICALS CORPORATION**

RXi Pharmaceuticals Corporation, a Delaware corporation (the "Company"), hereby certifies that:

1. The following resolution has been unanimously adopted by the Company's Board of Directors and has been approved by the holders of a majority of the Company's outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Company's Restated Certificate of Incorporation:

RESOLVED, that the Restated Certificate of Incorporation of the Company be amended by deleting in its entirety Article III, Section A, and by replacing it with the following:

"A. Classes of Stock. This Corporation is authorized to issue 130,000,000 shares, of which 125,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares will be Preferred Stock with a part value of \$0.0001 per share ("Preferred Stock")."

2. The above amendment was duly adopted by the Company in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, RXi Pharmaceuticals Corporation has caused this Certificate of Amendment to be signed by a duly authorized officer this 18th day of July 2011.

RXi Pharmaceuticals Corporation

By: /s/ Mark Ahn

Mark Ahn

President and Chief Executive Officer

CERTIFICATE OF OWNERSHIP AND MERGER
MERCING
GALENA BIOPHARMA, INC.
(a Delaware corporation)

WITH AND INTO
RXI PHARMACEUTICALS CORPORATION
(a Delaware corporation)

(Pursuant to Section 253 of the Delaware General Corporation Law)

RXi Pharmaceuticals Corporation, a Delaware corporation (the "Company"), does hereby certify to the following facts relating to the merger (the "Merger") of Galena Biopharma, Inc., a Delaware corporation (the "Subsidiary"), with and into the Company, with the Company remaining as the surviving corporation under the name of "Galena Biopharma, Inc."

1. The Subsidiary is a corporation incorporated on September 8, 2011 under the Delaware General Corporation Law (the "DGCL").
2. The Company is a corporation incorporated on April 3, 2006 under the DGCL.
3. The Company is the owner of all of the outstanding shares of the capital stock of the Subsidiary.
4. The Board of Directors of the Company, by resolutions duly adopted at a meeting of the Board of Directors of the Company held on August 23, 2011, determined to merge into itself the Subsidiary, and to effect a change of the Company's name to "Galena Biopharma, Inc." in connection with such merger, pursuant to Section 253 of the DGCL. Such resolutions are as follows:

WHEREAS, in view of the Company's proposed transfer and contribution to a wholly-owned subsidiary of the Company of certain RNAi assets and related obligations of RXi Pharmaceuticals Corporation (the "Company") (the "Spin-Off"), the Company has proposed to change its corporate name so as not to include the name "RXi" or "RNAi"; and

WHEREAS, after thorough consideration, the Board of Directors believes it is advisable and in the best interests of the Company and its stockholders to change the name of the Company to Galena Biopharma, Inc. from RXi Pharmaceuticals Corporation (the "Name Change"), and to effect such Name Change pursuant to the provisions of Section 253 of the Delaware General Corporation Law (the "DGCL"); and

WHEREAS, in order to effect the Name Change, the Company desires to form a new corporation named Galena Biopharma, Inc., a Delaware corporation (the "Subsidiary"), and to acquire shares of common stock, par value \$0.0001 per share, of the Subsidiary (collectively, the "Incorporation"); and

WHEREAS, following the effectiveness of the Incorporation, the Company will own all of the outstanding shares of the capital stock of the Subsidiary; and

WHEREAS, in order to consummate the Name Change, the Board of Directors of the Company believes it is advisable and in the best interests of the Company and its stockholders that, following the effectiveness of the Incorporation, the Subsidiary be merged with and into the Company (the “Merger”) pursuant to Section 253 of the DGCL, so that the Company will be the surviving corporation following the Merger and that the Name Change be effected as part of the Merger as permitted under the DGCL;

NOW, THEREFORE, BE IT RESOLVED, that the Incorporation is hereby authorized and approved in all respects; and it is

RESOLVED FURTHER, that the officers of the Company be and each hereby is authorized, empowered and directed, by and on behalf of the Company and in its name, to prepare or cause to be prepared, and to execute and file with the Delaware Secretary of State a Certificate of Incorporation to form the Subsidiary, and to take all such other actions as they or any one of them shall deem necessary or appropriate to consummate the Incorporation; and it is

RESOLVED FURTHER, that the Merger and the Name Change are hereby authorized and approved; and it is

RESOLVED FURTHER, that following the Incorporation, the officers of the Company be and each hereby is authorized, empowered and directed, by and on behalf of the Company and in its name, to effect the Name Change by merging the Subsidiary with and into the Company pursuant to Section 253 of the DGCL, so that the Company will be the surviving corporation and possess all of the Subsidiary’s property, rights, privileges and powers, and assume all of the Subsidiary’s liabilities and obligations; and it is

RESOLVED FURTHER, that by virtue of the Merger and without any action on the part of the holder thereof, each then outstanding share of common stock, par value \$0.0001 per share, of the Company (the “Common Stock”) shall remain unchanged and continue to remain outstanding as one share of Common Stock, held by the person who was the holder of such share of Common Stock immediately prior to the Merger; and it is

RESOLVED FURTHER, that by virtue of the Merger and without any action on the part of the holder thereof, each then outstanding share of common stock, par value \$0.0001 per share, of the Subsidiary shall be cancelled and no consideration shall be issued in respect thereof; and it is

RESOLVED FURTHER, that the directors and officers of the Company immediately prior to the Merger shall continue to remain the directors and officers of the Company until the earlier of their death, resignation or removal or until their respective successors are duly elected and qualified, as the case may be; and it is

RESOLVED FURTHER, that, pursuant to Section 253(b) of the DGCL, upon the effective date of the Merger, the corporate name of the Company shall be changed to Galena Biopharma, Inc.; and it is

RESOLVED FURTHER, that the Certificate of Incorporation of the Company as in effect immediately prior to the effective time of the Merger shall be the certificate of incorporation of the surviving corporation, except that Article I thereof shall be amended in its entirety to read as follows:

“ARTICLE I

The name of this corporation is Galena Biopharma, Inc.”

RESOLVED FURTHER, that the Bylaws of the Company as in effect immediately prior to the effective time of the Merger shall be amended and restated to reflect the Name Change; and it is

RESOLVED FURTHER, that the officers of the Company be and each hereby is authorized, empowered and directed, in the name and on behalf of the Company, to prepare or cause to be prepared, and to execute and file with the Delaware Secretary of State a Certificate of Ownership and Merger that sets forth therein a copy of these resolutions and the date that such resolutions were adopted by the Board of Directors; and it is

RESOLVED FURTHER, that the officers of the Company be, and each of them hereby is, authorized, empowered and directed, in the name and on behalf of the Company, to (i) notify the Company’s transfer agent and registrar for the Company’s common stock of the Name Change, (ii) obtain a new CUSIP number, (iii) prepare and file with the SEC a current report on Form 8-K to disclose the transactions contemplated by the foregoing resolutions, and (iv) execute such documents, disburse such funds, engage such persons, and take all such other actions that such officer may deem necessary or advisable in connection with the Name Change and the Merger and to carry out the intent and purpose of the foregoing resolutions.

5. The Company shall be the surviving corporation of the Merger.

6. The Certificate of Incorporation of the Company as in effect immediately prior to the effective time of the Merger shall be the certificate of incorporation of the surviving corporation, except that Article I thereof shall be amended in its entirety to read as follows:

“ARTICLE I

The name of this corporation is Galena Biopharma, Inc.”

7. The Merger shall be effective as of September 26, 2011.

IN WITNESS WHEREOF, RXi Pharmaceuticals Corporation has caused this Certificate of Ownership and Merger to be signed by its duly authorized officer, this 26 day of September 2011.

RXI PHARMACEUTICALS CORPORATION

By: /s/ Mark J. Ahn

Name: Mark J. Ahn, Ph.D.

Title: President and Chief Executive Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:59 PM 06/28/2013
FILED 04:56 PM 06/28/2013
SRV 130832067 - 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
GALENA BIOPHARMA, INC.**

Galena Biopharma, Inc., a Delaware corporation (the "Corporation"), hereby certifies that:

1. The following resolution has been unanimously adopted by the Corporation's Board of Directors and has been approved by the holders of a majority of the Corporation's outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Corporation's Amended and Restated Certificate of Incorporation:

RESOLVED, that ARTICLE III, Section A of the Amended and Restated Certificate of Incorporation of the Corporation shall be amended to read in its entirety as follows:

"A. Classes of Stock. This Corporation is authorized to issue 205,000,000 shares, of which 200,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("Preferred Stock")."

2. The above amendment was duly adopted by the Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Galena Biopharma, Inc. has caused this Certificate of Amendment to be signed by a duly authorized officer this 28th day of June 2013.

Galena Biopharma, Inc.

By: /s/ Mark J. Ahn
Mark J. Ahn, Ph.D.
President and Chief Executive Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 11:17 AM 07/22/2013
FILED 09:13 AM 07/22/2013
SRV 130900861 - 4136433 FILE

CERTIFICATE OF CHANGE OF LOCATION OF REGISTERED OFFICE
AND OF REGISTERED AGENT
OF
GALENA BIOPHARMA, INC.

It is hereby certified that:

1. The name of the corporation (hereinafter called the "corporation") is:

GALENA BIOPHARMA, INC.

2. The registered office of the corporation within the State of Delaware is hereby changed to 2711 Centerville Road, Suite 400, City of Wilmington 19808, County of New Castle.

3. The registered agent of the corporation within the State of Delaware is hereby changed to Corporation Service Company, the business office of which is identical with the registered office of the corporation as hereby changed.

4. The corporation has authorized the changes hereinbefore set forth by resolution of its Board of Directors.

Signed:
Galena Biopharma, Inc.

By: /s/ Mark W. Schwartz
Name: Mark W. Schwartz, Ph.D.
Title: Executive Vice President & COO

State of Delaware
Secretary of State
Division of Corporations
Delivered 02:36 PM 06/19/2015
FILED 02:23 PM 06/19/2015
SRV 150947213 - 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
GALENA BIOPHARMA, INC.**

Galena Biopharma, Inc., a Delaware corporation (the "Corporation"), hereby certifies that:

1. The following resolution has been unanimously adopted by the Corporation's Board of Directors and has been approved by the holders of a majority of the Corporation's outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Corporation's Amended and Restated Certificate of Incorporation:

RESOLVED, that ARTICLE III, Section A of the Amended and Restated Certificate of Incorporation of the Corporation shall be amended to read in its entirety as follows:

"A. Classes of Stock. This Corporation is authorized to issue 280,000,000 shares, of which 275,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("Preferred Stock")."

2. The above amendment was duly adopted by the Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Galena Biopharma, Inc. has caused this Certificate of Amendment to be signed by a duly authorized officer this 19th day of June 2015.

Galena Biopharma, Inc.

By: /s/ Mark W. Schwartz
Mark W. Schwartz, Ph.D.
President and Chief Executive Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 10:00 AM 10/17/2016
FILED 10:00 AM 10/17/2016
SR 20166250740 - File Number 4136433

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST : That at a meeting of the Board of Directors of Galena Biopharma, Inc. resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "Section (A) of Article III" so that, as amended, said Article shall be and read as follows:

A. Classes of Stock. This Corporation is authorized to issue 355,000,000 shares, of which 350,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("Preferred Stock").

SECOND : That thereafter, pursuant to resolution of its Board of Directors, at the annual meeting of the stockholders of said corporation duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF , said corporation has caused this certificate to be signed this 14th day of September 2016.

By: /s/ Thomas J. Knapp

Authorized Officer

Title: Corporate Secretary

Name: Thomas J. Knapp

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST : That at a meeting of the Board of Directors of Galena Biopharma, Inc., resolutions were duly adopted setting forth an amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be effective based on the vote of stockholders at a special meeting of the stockholders of said corporation. The resolution setting forth the amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "Section (A) of Article III" so that, as amended and restated, said Article shall be and read as follows:

"A. Classes of Stock. This Corporation is authorized to issue 355,000,000 shares, of which 350,000,000 shall be Common Stock with a par value of \$0.0001 per share (the "Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share.

Reverse Stock Split. Effective at 12:01 a.m., Eastern Standard Time on November 11, 2016 (the "Effective Time"), each 20 shares of common stock issued and outstanding or held by the Corporation in treasury immediately prior to the Effective Time (the "Old Common Stock") shall automatically without further action on the part of the Corporation or any holder of Old Common Stock, be reclassified, combined and changed into one fully paid and nonassessable share of new common stock (the "New Common Stock"). There shall be no fractional shares issued with respect to the New Common Stock. In lieu thereof, the aggregate of all fractional shares otherwise issuable to the holders of record of Old Common Stock shall be issued to Computershare (the "Transfer Agent"), as agent, for the accounts of all holders of record of Old Common Stock otherwise entitled to have a fraction of a share issued to them. The sale of all fractional interests will be effected by the Transfer Agent as soon as practicable after the Effective Time on the basis of prevailing market prices of the New Common Stock at the time of sale. After such sale and upon the surrender of the stockholders' stock certificates, the Transfer Agent will pay to such holders of record their pro rata share of the net proceeds derived from the sale of the fractional interests. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of whole shares of New Common Stock into which such Old Common Stock shall have been reclassified, combined and changed pursuant to this Certificate of Amendment, subject to the elimination of fractional share interests as described above."

SECOND : That pursuant to resolution of its Board of Directors, at the special meeting of the stockholders of said corporation duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD : That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF , said corporation has caused this certificate to be signed this 1st day of November 2016.

By: /s/ Thomas J. Knapp _____

Authorized Officer

Title: Corporate Secretary

Name: Thomas J. Knapp

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:43 PM 07/06/2017
FILED 01:43 PM 07/06/2017
SR 20175230494 - File Number 4136433

**CERTIFICATE OF VALIDATION
OF
GALENA BIOPHARMA, INC.**

Pursuant to Section 204 of the
General Corporation Law of the State of Delaware

Galena Biopharma, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies as follows:

1. The defective corporate acts that are the subject of this Certificate of Validation are the filing and effectiveness of the Certificate of Amendment of the Certificate of Incorporation of the Corporation (the "Certificate of Amendment") on July 26, 2011 and the increase in the authorized number of shares of common stock, par value \$0.0001 per share, of the Corporation effected thereby.
2. The nature of the failure of authorization in respect of the filing and effectiveness of the Certificate of Amendment and such increase was that the vote of the Corporation's stockholders in favor of the proposal to adopt the amendment set forth in the Certificate of Amendment may not have been tabulated in conformity with the disclosure set forth in the proxy statement for the meeting of stockholders at which it was approved.
3. The defective corporate acts that are the subject of this Certificate of Validation were duly ratified in accordance with Section 204 of General Corporation Law of the State of Delaware (the "DGCL") pursuant to resolutions of the Board of Directors of the Corporation adopted on May 30, 2017 and resolutions of the stockholders of the Corporation adopted on July 6, 2017.
4. The Certificate of Amendment was previously filed under Section 103 of the DGCL in respect of the defective corporate acts that are the subject of this Certificate of Validation on July 26, 2011. A copy of the Certificate of Amendment is attached as Exhibit A to this Certificate of Validation.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Validation to be executed by its duly authorized officer as of this 6th day of July, 2017.

GALENA BIOPHARMA, INC.

By: /s/ Thomas J. Knapp

Name: Thomas J. Knapp

Title: Corporate Secretary

EXHIBIT A

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:08 PM 07/26/2011
FILED 04:08 PM 07/26/2011
SRV 110859225 – 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
RESTATED CERTIFICATE OF INCORPORATION OF
RXi PHARMACEUTICALS CORPORATION**

RXi Pharmaceuticals Corporation, a Delaware corporation (the “Company”), hereby certifies that:

1. The following resolution has been unanimously adopted by the Company’s Board of Directors and has been approved by the holders of a majority of the Company’s outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Company’s Restated Certificate of Incorporation:

RESOLVED, that the Restated Certificate of Incorporation of the Company be amended by deleting in its entirety Article III, Section A, and by replacing it with the following:

“ **A. Classes of Stock** . This Corporation is authorized to issue 130,000,000 shares, of which 125,000,000 shares shall be Common Stock with a par value of \$0.0001 per share (“ Common Stock ”) and 5,000,000 shares will be Preferred Stock with a part value of \$0.0001 per share (“ Preferred Stock ”).”

2. The above amendment was duly adopted by the Company in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, RXi Pharmaceuticals Corporation has caused this Certificate of Amendment to be signed by a duly authorized officer this 18th day of July 2011.

RXi Pharmaceuticals Corporation

By: /s/ Mark Ahn

Mark Ahn

President and Chief Executive Officer

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:44 PM 07/06/2017
FILED 01:44 PM 07/06/2017
SR 20175230569 - File Number 4136433

**CERTIFICATE OF VALIDATION
OF
GALENA BIOPHARMA, INC.**

Pursuant to Section 204 of the
General Corporation Law of the State of Delaware

Galena Biopharma, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies as follows:

1. The defective corporate acts that are the subject of this Certificate of Validation are the filing and effectiveness of the Certificate of Amendment of the Certificate of Incorporation of the Corporation (the "Certificate of Amendment") on June 28, 2013 and the increase in the authorized number of shares of common stock, par value \$0.0001 per share, of the Corporation effected thereby.
2. The nature of the failure of authorization in respect of the filing and effectiveness of the Certificate of Amendment and such increase was that the vote of the Corporation's stockholders in favor of the proposal to adopt the amendment set forth in the Certificate of Amendment may not have been tabulated in conformity with the disclosure set forth in the proxy statement for the meeting of stockholders at which it was approved.
3. The defective corporate acts that are the subject of this Certificate of Validation were duly ratified in accordance with Section 204 of General Corporation Law of the State of Delaware (the "DGCL") pursuant to resolutions of the Board of Directors of the Corporation adopted on May 30, 2017 and resolutions of the stockholders of the Corporation adopted on July 6, 2017.
4. The Certificate of Amendment was previously filed under Section 103 of the DGCL in respect of the defective corporate acts that are the subject of this Certificate of Validation on June 28, 2013. A copy of the Certificate of Amendment is attached as Exhibit A to this Certificate of Validation.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Validation to be executed by its duly authorized officer as of this 6th day of July, 2017.

GALENA BIOPHARMA, INC.

By: /s/ Thomas J. Knapp

Name: Thomas J. Knapp

Title: Corporate Secretary

EXHIBIT A

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:59 PM 06/28/2013
FILED 04:56 PM 06/28/2013
SRV 130832067 – 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
GALENA BIOPHARMA, INC.**

Galena Biopharma, Inc., a Delaware corporation (the “Corporation”), hereby certifies that:

1. The following resolution has been unanimously adopted by the Corporation’s Board of Directors and has been approved by the holders of a majority of the Corporation’s outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Corporation’s Amended and Restated Certificate of Incorporation:

RESOLVED, that ARTICLE III. Section A of the Amended and Restated Certificate of Incorporation of the Corporation shall be amended to read in its entirety as follows:

“**A. Classes of Stock.** This Corporation is authorized to issue 205,000,000 shares, of which 200,000,000 shares shall be Common Stock with a par value of \$0.0001 per share (“Common Stock”) and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share (“Preferred Stock”).”

2. The above amendment was duly adopted by the Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Galena Biopharma, Inc. has caused this Certificate of Amendment to be signed by a duly authorized officer this 28th day of June 2013.

Galena Biopharma, Inc.

By: /s/ Mark J. Ahn

Mark J. Ahn, Ph. D.

President and Chief Executive Officer

**CERTIFICATE OF VALIDATION
OF
GALENA BIOPHARMA, INC.**

Pursuant to Section 204 of the
General Corporation Law of the State of Delaware

Galena Biopharma, Inc., a corporation organized and existing under the laws of the State of Delaware (the “Corporation”), certifies as follows:

1. The defective corporate acts that are the subject of this Certificate of Validation are the filing and effectiveness of the Certificate of Amendment of the Certificate of Incorporation of the Corporation (the “Certificate of Amendment”) on June 19, 2015 and the increase in the authorized number of shares of common stock, par value \$0.0001 per share, of the Corporation effected thereby.
2. The nature of the failure of authorization in respect of the filing and effectiveness of the Certificate of Amendment and such increase was that the vote of the Corporation’s stockholders in favor of the proposal to adopt the amendment set forth in the Certificate of Amendment may not have been tabulated in conformity with the disclosure set forth in the proxy statement for the meeting of stockholders at which it was approved.
3. The defective corporate acts that are the subject of this Certificate of Validation were duly ratified in accordance with Section 204 of General Corporation Law of the State of Delaware (the “DGCL”) pursuant to resolutions of the Board of Directors of the Corporation adopted on May 30, 2017 and resolutions of the stockholders of the Corporation adopted on July 6, 2017.
4. The Certificate of Amendment was previously filed under Section 103 of the DGCL in respect of the defective corporate acts that were the subject of this Certificate of Validation on June 19, 2015. A copy of the Certificate of Amendment is attached as Exhibit A to this Certificate of Validation.

[Signature Page Follows]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Validation to be executed by its duly authorized officer as of this 6th day of July, 2017.

GALENA BIOPHARMA, INC.

By: /s/ Thomas J. Knapp

Name: Thomas J. Knapp

Title: Corporate Secretary

EXHIBIT A

State of Delaware
Secretary of State
Division of Corporations
Delivered 02:36 PM 06/19/2015
FILED 02:23 PM 06/19/2015
SRV 150947213 – 4136433 FILE

**CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
GALENA BIOPHARMA, INC.**

Galena Biopharma, Inc., a Delaware corporation (the “Corporation”), hereby certifies that:

1. The following resolution has been unanimously adopted by the Corporation’s Board of Directors and has been approved by the holders of a majority of the Corporation’s outstanding common stock in accordance with the Delaware General Corporation Law for the purpose of amending the Corporation’s Amended and Restated Certificate of Incorporation:

RESOLVED, that ARTICLE III, Section A of the Amended and Restated Certificate of Incorporation of the Corporation shall be amended to read in its entirety as follows:

“**A. Classes of Stock.** This Corporation is authorized to issue 280,000,000 shares, of which 275,000,000 shares shall be Common Stock with a par value of \$0.0001 per share (“Common Stock”) and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share (“Preferred Stock”).”

2. The above amendment was duly adopted by the Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Galena Biopharma, Inc. has caused this Certificate of Amendment to be signed by a duly authorized officer this 19th day of June 2015.

Galena Biopharma, Inc.

By: /s/ Mark W. Schwartz
Mark W. Schwartz, Ph.D.
President and Chief Executive Officer

**CERTIFICATE OF VALIDATION
OF
GALENA BIOPHARMA, INC.**

Pursuant to Section 204 of the
General Corporation Law of the State of Delaware

Galena Biopharma, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies as follows:

1. The defective corporate acts that are the subject of this Certificate of Validation are the filing and effectiveness of the Certificate of Amendment of the Certificate of Incorporation of the Corporation (the "Certificate of Amendment") on October 17, 2016 and the increase in the authorized number of shares of common stock, par value \$0.0001 per share, of the Corporation effected thereby.
2. The nature of the failure of authorization in respect of the filing and effectiveness of the Certificate of Amendment and such increase was that the vote of the Corporation's stockholders in favor of the proposal to adopt the amendment set forth in the Certificate of Amendment may not have been tabulated in conformity with the disclosure set forth in the proxy statement for the meeting of stockholders at which it was approved.
3. The defective corporate acts that are the subject of this Certificate of Validation were duly ratified in accordance with Section 204 of General Corporation Law of the State of Delaware (the "DGCL") pursuant to resolutions of the Board of Directors of the Corporation adopted on May 30, 2017 and resolutions of the stockholders of the Corporation adopted on July 6, 2017.
4. The Certificate of Amendment was previously filed under Section 103 of the DGCL in respect of the defective corporate acts that are the subject of this Certificate of Validation on October 17, 2016. A copy of the Certificate of Amendment is attached as Exhibit A to this Certificate of Validation.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Validation to be executed by its duly authorized officer as of this 6th day of July, 2017.

GALENA BIOPHARMA, INC.

By: /s/ Thomas J. Knapp

Name: Thomas J. Knapp

Title: Corporate Secretary

EXHIBIT A

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST : That at a meeting of the Board of Directors of Galena Biopharma, Inc. resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

RESOLVED , that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "Section (A) of Article III" so that, as amended, said Article shall be and read as follows:

A. Classes of Stock . This Corporation is authorized to issue 355,000,000 shares, of which 350,000,000 shares shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("Preferred Stock").

SECOND : That thereafter, pursuant to resolution of its Board of Directors, at the annual meeting of the stockholders of said corporation duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD : That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF , said corporation has caused this certificate to be signed this 14th day of September 2016.

By: /s/ Thomas J. Knapp
Authorized Officer
Title: Corporate Secretary
Name: Thomas J. Knapp

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:47 PM 07/06/2017
FILED 01:47 PM 07/06/2017
SR 20175230716 - File Number 4136433

**CERTIFICATE OF VALIDATION
OF
GALENA BIOPHARMA, INC.**

Pursuant to Section 204 of the
General Corporation Law of the State of Delaware

Galena Biopharma, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), certifies as follows:

1. The defective corporate acts that are the subject of this Certificate of Validation are the filing and effectiveness of the Certificate of Amendment of the Certificate of Incorporation of the Corporation (the "Certificate of Amendment") on November 2, 2016 and the 1-for-20 reverse stock split of the common stock, par value \$0.0001 per share, of the Corporation effected thereby.

2. The nature of the failure of authorization in respect of the filing and effectiveness of the Certificate of Amendment and such reverse stock split was that the vote of the Corporation's stockholders in favor of the proposal to adopt the amendment set forth in the Certificate of Amendment may not have been tabulated in conformity with the disclosure set forth in the proxy statement for the meeting of stockholders at which it was approved, and that the amendment set forth in the Certificate of Amendment differed from the form of amendment set forth in the proxy statement for the meeting of stockholders at which it was approved and may not have been approved in accordance with Section 242 of the General Corporation Law of the State of Delaware (the "DGCL").

3. The defective corporate acts that are the subject of this Certificate of Validation were duly ratified in accordance with Section 204 of the DGCL pursuant to resolutions of the Board of Directors of the Corporation adopted on May 30, 2017 and resolutions of the stockholders of the Corporation adopted on July 6, 2017.

4. The Certificate of Amendment was previously filed under Section 103 of the DGCL in respect of the defective corporate acts that are the subject of this Certificate of Validation on November 2, 2016. A copy of the Certificate of Amendment is attached as Exhibit A to this Certificate of Validation.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Validation to be executed by its duly authorized officer as of this 6th day of July, 2017.

GALENA BIOPHARMA, INC.

By: /s/ Thomas J. Knapp

Name: Thomas J. Knapp

Title: Corporate Secretary

EXHIBIT A

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: That at a meeting of the Board of Directors of Galena Biopharma, Inc., resolutions were duly adopted setting forth an amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be effective based on the vote of stockholders at a special meeting of the stockholders of said corporation. The resolution setting forth the amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "Section (A) of Article III" so that, as amended and restated, said Article shall be and read as follows:

"A. Classes of Stock. This Corporation is authorized to issue 355,000,000 shares, of which 350,000,000 shall be Common Stock with a par value of \$0.0001 per share (the "Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share.

Reverse Stock Split. Effective at 12:01 a.m., Eastern Standard Time on November 11, 2016 (the "Effective Time"), each 20 shares of common stock issued and outstanding or held by the Corporation in treasury immediately prior to the Effective Time (the "Old Common Stock") shall automatically without further action on the part of the Corporation or any holder of Old Common Stock, be reclassified, combined and changed into one fully paid and nonassessable share of new common stock (the "New Common Stock"). There shall be no fractional shares issued with respect to the New Common Stock. In lieu thereof, the aggregate of all fractional shares otherwise issuable to the holders of record of Old Common Stock shall be issued to Computershare (the "Transfer Agent"), as agent, for the accounts of all holders of record of Old Common Stock otherwise entitled to have a fraction of a share issued to them. The sale of all fractional interests will be effected by the Transfer Agent as soon as practicable after the Effective Time on the basis of prevailing market prices of the New Common Stock at the time of sale. After such sale and upon the surrender of the stockholders' stock certificates, the Transfer Agent will pay to such holders of record their pro rata share of the net proceeds derived from the sale of the fractional interests. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of whole shares of New Common Stock into which such Old Common Stock shall have been reclassified, combined and changed pursuant to this Certificate of Amendment, subject to the elimination of fractional share interests as described above."

SECOND: That pursuant to resolution of its Board of Directors, at the special meeting of the stockholders of said corporation duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF , said corporation has caused this certificate to be signed this 1st day of November 2016.

By: /s/ Thomas J. Knapp

Authorized Officer

Title: Corporate Secretary

Name: Thomas J. Knapp

State of Delaware
Secretary of State
Division of Corporations
Delivered 09:30 AM 12/29/2017
FILED 09:30 AM 12/29/2017
SR 20177841406 - File Number 4136433

**CERTIFICATE OF AMENDMENT OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
GALENA BIOPHARMA, INC.**

(Pursuant to Sections 242 of the

General Corporation Law of the State of Delaware)

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

FIRST: That Section (A) of Article III of the Amended and Restated Certificate of Incorporation of the Corporation, as heretofore amended, be, and hereby is, amended in its entirety to read as follows:

A. Classes of Stock. This Corporation is authorized to issue 355,000,000 shares, of which 350,000,000 shall be Common Stock with a par value of \$0.0001 per share ("Common Stock") and 5,000,000 shares shall be Preferred Stock with a par value of \$0.0001 per share ("**Preferred Stock**").

Reverse Stock Split. Upon the effectiveness of the filing of this Certificate of Amendment (the "Effective Time"), each 10 to 30 shares of common stock issued and outstanding or held by the Corporation in treasury immediately prior to the Effective Time (the "Old Common Stock") shall automatically be reclassified into one fully paid and nonassessable share of new common stock (the "New Common Stock"), with the exact ratio within such range to be determined by the board of directors of the Corporation prior to the Effective Time and set forth in a public announcement made by the Corporation (the "Reverse Stock Split"). No fractional shares of New Common Stock shall be issued in connection with the Reverse Stock Split. In lieu of any fractional shares of New Common Stock that would be issued in connection with the Reverse Stock Split, the aggregate of all such fractional shares otherwise issuable to the holders of record of Old Common Stock shall be issued to Computershare Trust Company, N.A. (the "Transfer Agent"), as agent, for the accounts of all holders of record of Old Common Stock otherwise entitled to have a fraction of a share issued to them. The sale of all such fractional shares will be effected by the Transfer Agent as soon as practicable after the Effective Time on the basis of prevailing market prices of the New Common Stock at the time of sale. After such sale and upon the surrender of the stockholders' stock certificates, the Transfer Agent will pay to such holders of record the portion of the net proceeds derived from the sale of the fractional interests to which they are entitled. From and after the Effective Time, certificates

representing shares of the Old Common Stock shall represent the number of whole shares of New Common Stock into which such shares of Old Common Stock shall have been reclassified pursuant to this Certificate of Amendment, subject to the elimination of fractional share interests as described above.

SECOND: That pursuant to resolution of its Board of Directors, at the special meeting of the stockholders of said corporation duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

FOURTH: That said amendment shall become effective at 4:15 p.m. (Eastern Time) on December 29, 2017.

IN WITNESS WHEREOF, said corporation has caused this certificate to be signed this 29 day of December 2017.

By: /s/ Thomas J. Knapp
Authorized Officer
Title: Interim General Counsel & Corporate Secretary
Name: Thomas J. Knapp

*[Signature Page to Certificate of Amendment of
Amended and Restated Certificate of Incorporation (Reverse Stock Split)]*

State of Delaware
Secretary of State
Division of Corporations
Delivered 11:00 AM 12/29/2017
FILED 11:00 AM 12/29/2017
SR 20177844707 - File Number 4136433

**CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
GALENA BIOPHARMA, INC.**

**(Pursuant to Sections 242 of the
General Corporation Law of the State of Delaware)**

Galena Biopharma, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

FIRST: That Article I of the Amended and Restated Certificate of Incorporation of the Corporation, as heretofore amended, be, and hereby is, amended in its entirety to read as follows:

ARTICLE I

The name of this corporation is "SELLAS Life Sciences Group, Inc.".

SECOND: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

THIRD: That said amendment shall become effective at 4:45 p.m. (Eastern Time) on December 29, 2017.

IN WITNESS WHEREOF, said corporation has caused this certificate to be signed this 29th day of December 2017.

By: /s/ Thomas J. Knapp
Authorized Officer
Title: Interim General Counsel & Corporate Secretary
Name: Thomas J. Knapp

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:26 PM 03/08/2018
FILED 04:26 PM 03/08/2018
SR 20181800105 - File Number 4136433

SELLAS LIFE SCIENCES GROUP, INC.
CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES A 20% CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 151 OF THE
GENERAL CORPORATION LAW OF THE STATE OF DELAWARE

SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Corporation”), does hereby certify that, pursuant to Section 151 of the General Corporation Law of the State of Delaware, the following resolution was duly adopted by the board of directors of the Corporation (the “Board of Directors”):

WHEREAS, the certificate of incorporation of the Corporation provides for a class of its authorized stock known as preferred stock, consisting of 5,000,000 shares, \$0.0001 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix the dividend rights, dividend rate, voting rights, conversion rights, rights and terms of redemption and liquidation preferences of any wholly unissued series of preferred stock and the number of shares constituting any series and the designation thereof, of any of them; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of, except as otherwise set forth in the Purchase Agreement, up to 17,500 shares of the preferred stock which the Corporation has the authority to issue, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock for cash or exchange of other securities, rights or property and does hereby fix and determine the rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

TERMS OF PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“Alternate Consideration” shall have the meaning set forth in Section 7(e).

“Base Conversion Price” shall have the meaning set forth in Section 7(b).

“Beneficial Ownership Limitation” shall have the meaning set forth in Section 6(d).

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

“Buy-In” shall have the meaning set forth in Section 6(c)(iv).

“Change of Control Transaction” means the occurrence after the Original Issue Date of any of (a) an acquisition by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 33% of the voting securities of the Corporation (other than by means of conversion or exercise of Preferred Stock and the Securities issued together with the Preferred Stock), (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the Corporation or the successor entity of such transaction, (c) the Corporation sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the acquiring entity immediately after the transaction, (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date), or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Closings” means the First Closing and the Second Closing.

“Closing Date” means either the First Closing Date or the Second Closing Date, as the case may be.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the Corporation’s common stock, par value \$0.0001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Conversion Amount” means the sum of the Stated Value at issue.

“Conversion Date” shall have the meaning set forth in Section 6(a).

“Conversion Price” shall have the meaning set forth in Section 6(b).

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

“Dilutive Issuance” shall have the meaning set forth in Section 7(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 7(b).

“Dividend Conversion Rate” means the lesser of (a) the Conversion Price or (b) 90% of the lesser of (i) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the applicable Dividend Payment Date or (ii) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the date the applicable Dividend Conversion Shares are issued and delivered if such delivery is after the Dividend Payment Date.

“Dividend Conversion Shares” shall have the meaning set forth in Section 3(a).

“Dividend Notice Period” shall have the meaning set forth in Section 3(a).

“Dividend Payment Date” shall have the meaning set forth in Section 3(a).

“Dividend Share Amount” shall have the meaning set forth in Section 3(a).

“Equity Conditions” means, during the period in question, (a) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any, (b) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Preferred Stock, (c) all of the Conversion Shares issuable pursuant to the Transaction Documents (and shares issuable in lieu of cash payments of dividends) may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and acceptable to the Transfer Agent and the affected Holders, (d) the Common Stock is trading on a Trading Market and all of the shares issuable pursuant to the Transaction Documents are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future), (e) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (f) the issuance of the shares in question to the applicable Holder would not violate the limitations set forth in Section 6(d) and Section 6(e) herein, (g) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated, (h) the applicable Holder is not in possession of any information provided by the Corporation, any of its Subsidiaries, or any of their officers, directors, employees, agents or Affiliates, that constitutes, or may constitute, material non-public information, and (i) for each Trading Day in a period of 20 consecutive Trading Days prior to the applicable date in question, the daily trading volume for the Common Stock on the principal Trading Market exceeds \$50,000 of shares per Trading Day (subject to adjustment for forward and reverse stock splits and the like).

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

“Exempt Issuance” means the issuance of (a) shares of Common Stock, options or other awards to employees, independent contractors, consultants, officers or directors of the Corporation pursuant to any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Corporation (provided, however, any such issuances to independent contractors and consultants shall not exceed, in the aggregate, \$250,000 in any three month period), (b) securities issued and issuable pursuant to the Purchase Agreement and securities issued and issuable upon the exercise or exchange of or conversion of any securities issued pursuant to the Purchase Agreement and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of the Purchase Agreement, provided that such securities have not been amended since the date of the Purchase Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of any such securities (other than in connection with stock splits or combinations) or to extend the term of such

securities, (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Corporation, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) of the Purchase Agreement, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Corporation and shall provide to the Corporation additional benefits in addition to the investment of funds, but shall not include a transaction in which the Corporation is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, and (d) issuances to independent contractors and consultants of the Corporation, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith.

“First Closing” means the closing of the purchase and sale of the Securities pursuant to Section 2.1(a) of the Purchase Agreement.

“First Closing Date” means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) each Holder’s obligations to pay the Subscription Amount and (ii) the Corporation’s obligations to deliver the Securities issuable at the First Closing, in each case, have been satisfied or waived.

“Fundamental Transaction” shall have the meaning set forth in Section 7(e).

“GAAP” means United States generally accepted accounting principles.

“Holder” shall have the meaning given such term in Section 2.

“Issuable Maximum” shall have the meaning set forth in Section 6(e).

“Issue Date” means the Original Issue Date or the Subsequent Issue Date, as the case may be.

“Junior Securities” means the Common Stock and all other Common Stock Equivalents of the Corporation other than those securities which are explicitly senior or pari passu to the Preferred Stock in dividend rights or liquidation preference.

“Liens” means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Liquidation” shall have the meaning set forth in Section 5.

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

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

“Original Issue Date” means the date of the first issuance of any shares of the Preferred Stock, regardless of the number of transfers of any particular shares of Preferred Stock, and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Preferred Stock” shall have the meaning set forth in Section 2.

“Purchase Agreement” means the Securities Purchase Agreement, dated as of the Original Issue Date, among the Corporation and the original Holders, as amended, modified or supplemented from time to time in accordance with its terms.

“Qualified Offering” means a public offering, as defined in Nasdaq IM-5635-3, that raises gross proceeds equal to at least the aggregate gross proceeds from the sale of Preferred Stock at the First Closing and the Second Closing (exclusive of any proceeds from the exercise of the Warrants), but in no event less than \$20,000,000.

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“Second Closing” means the second closing of the purchase and sale of the Securities pursuant to Section 2.1(b) of the Purchase Agreement.

“Second Closing Date” means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) each Holder’s obligations to pay the Subscription Amount and (ii) the Corporation’s obligations to deliver the Securities issuable at the Second Closing, in each case, have been satisfied or waived.

“Securities” means the Preferred Stock, the Warrants, the Warrant Shares and the Underlying Shares.

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

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2, as the same may be increased pursuant to Section 3.

“Shareholder Approval” means such approval as may be required by the applicable rules and regulations of the Nasdaq Stock Market (or any successor entity) from the shareholders of the Corporation with respect to the transactions contemplated by the Transaction Documents, including any reset, adjustment or anti-dilution provision in the Transaction Documents and the issuance of all of the Underlying Shares in excess of 19.99% of the issued and outstanding Common Stock on the First Closing Date.

“Subscription Amount” shall mean, as to each Holder, the aggregate amount to be paid for the Preferred Stock purchased pursuant to the Purchase Agreement as specified below such Holder’s name on the signature page of the Purchase Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Subsequent Issue Date” means the date of the issuance of any shares of the Preferred Stock on the Second Closing Date, regardless of the number of transfers of any particular shares of Preferred Stock, and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Subsidiary” means any subsidiary of the Corporation as set forth on Schedule 3.1(a) of the Purchase Agreement and shall, where applicable, also include any direct or indirect subsidiary of the Corporation formed or acquired after the date of the Purchase Agreement.

“Successor Entity” shall have the meaning set forth in Section 7(e).

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

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

“Transaction Documents” means this Certificate of Designation, the Purchase Agreement, the Warrants, the Voting Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Purchase Agreement.

“Transfer Agent” means Computershare Trust Company, N.A., the current transfer agent of the Corporation with a mailing address of 250 Royall St., Canton, MA 02021 and a facsimile number of +1 303 262 0609, and any successor transfer agent of the Corporation.

“Underlying Shares” means the shares of Common Stock issued and issuable upon conversion of the Preferred Stock, upon exercise of the Warrants and issued and issuable in lieu of the cash payment of dividends on the Preferred Stock in accordance with the terms of this Certificate of Designation.

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.12(b) of the Purchase Agreement.

“Voting Agreement” means the written agreement, in the form of Exhibit B attached to the Purchase Agreement, of all of the officers, directors and stockholders holding more than 10% of the issued and outstanding shares of Common Stock on the date of the Purchase Agreement to vote all Common Stock over which such Persons have voting control as of the record date for the meeting of stockholders of the Corporation, amounting to, in the aggregate, at least 50% of the issued and outstanding Common Stock.

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

“Warrants” means, collectively, the Common Stock purchase warrants delivered to the Holder at each Closing in accordance with Section 2.2(a) of the Purchase Agreement, which Warrants shall be exercisable on the six month anniversary of the date of issuance and have a term of exercise equal to five (5) years from such date, in the form of Exhibit C attached to the Purchase Agreement.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as its Series A 20% Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be up to 17,500 (which shall not be subject to increase without the written consent of Holders of a majority in interest of the Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Preferred Stock shall have a par value of \$0.0001 per share and a stated value equal to \$1,000, subject to increase set forth in Section 3 below (the “Stated Value”).

Section 3. Dividends.

a) Dividends in Cash or in Kind. Holders shall be entitled to receive, and the Corporation shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) of 20% per annum, payable semiannually on June 30 and December 31, beginning on the first such date after the applicable Issue Date and on each Conversion Date (with respect only to Preferred Stock being converted) (each such date, a “Dividend Payment Date”) (if any Dividend Payment Date is not a Trading Day, the applicable payment shall be due on the next succeeding Trading Day) in cash, or at the Corporation’s option, in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock as set forth in this Section 3(a), or a combination thereof (the dollar amount to be paid in shares of Common Stock, the “Dividend Share Amount”). Upon the consummation of a Qualified Offering, and the receipt by the Corporation of the proceeds therefrom, dividends payable pursuant to this Section 3(a) shall cease to accrue; provided, however, any such dividends that have accrued prior to such Qualified Offering shall be paid on the tenth Trading Day immediately preceding the consummation of a Qualified Offering. The form of dividend payments to each Holder shall be determined in the following order of priority: (i) if funds are legally available for the payment of dividends and the Equity Conditions have not been met during the 20 consecutive Trading Days immediately prior to the applicable Dividend Payment Date (the “Dividend Notice Period”), in cash only, (ii) if funds are legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, at the sole election of the Corporation, in cash or shares of Common Stock which shall be valued at the Dividend Conversion Rate, (iii) if funds are not legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, in shares of Common Stock which shall be valued at the Dividend Conversion Rate, and (iv) if funds are not legally available for the payment of dividends and the Equity Conditions have not been met during the Dividend Notice Period, then, at the election of such Holder, such dividends shall accrue to the next Dividend Payment Date or shall be accreted to, and increase, the outstanding Stated Value. In addition, as a condition to paying dividends in shares of Common Stock, as to such Dividend Payment Date, prior to such Dividend Notice Period (but not more than five (5) Trading Days prior to the commencement of such Dividend Notice Period), the Corporation shall have delivered to each Holder’s account with The Depository Trust Company a number of shares of Common Stock to be applied against such Dividend Share Amount equal to the quotient of (x) the applicable Dividend Share Amount divided by (y) the Dividend Conversion Rate, assuming for such purposes that the Dividend Payment Date is the Trading Day immediately prior to the commencement of the Dividend Notice Period (the “Dividend Conversion Shares”). The Holders shall have the same rights and remedies with respect to the delivery of any such shares as if such shares were being issued pursuant to Section 6.

b) Corporation's Ability to Pay Dividends in Cash or Kind. On each Closing Date, the Corporation shall have notified the Holders whether or not it may legally pay cash dividends as of the applicable Closing Date. The Corporation shall promptly notify the Holders at any time the Corporation shall become able or unable, as the case may be, to legally pay cash dividends. If at any time the Corporation has the right to pay dividends in cash or shares of Common Stock, the Corporation must provide the Holders with at least 20 Trading Days' notice of its election to pay a regularly scheduled dividend in shares of Common Stock (the Corporation may indicate in such notice that the election contained in such notice shall continue for later periods until revised by a subsequent notice). The aggregate number of shares of Common Stock otherwise issuable to a Holder on a Dividend Payment Date shall be reduced by the number of shares of Common Stock previously issued to such Holder in connection with such Dividend Payment Date. If any Dividend Conversion Shares are issued to a Holder in connection with a Dividend Payment Date and are not applied against a Dividend Share Amount, then such Holder shall promptly return such excess shares to the Corporation.

c) Dividend Calculations. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar-day periods, and shall accrue daily commencing on the applicable Issue Date, and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. Payment of dividends in shares of Common Stock shall otherwise occur pursuant to Section 6(c)(i) herein and, solely for purposes of the payment of dividends in shares, the Dividend Payment Date shall be deemed the Conversion Date. Dividends shall cease to accrue with respect to any Preferred Stock converted, provided that, the Corporation actually delivers the Conversion Shares within the time period required by Section 6(c)(i) herein. Except as otherwise provided herein, if at any time the Corporation pays dividends partially in cash and partially in shares, then such payment shall be distributed ratably among the Holders based upon the number of shares of Preferred Stock held by each Holder on such Dividend Payment Date.

d) Late Fees. Any dividends, whether paid in cash or shares of Common Stock, that are not paid within three Trading Days following a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 18% per annum or the lesser rate permitted by applicable law which shall accrue daily from the Dividend Payment Date through and including the date of actual payment in full.

e) Other Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall redeem, purchase or otherwise acquire directly or indirectly any Junior Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall directly or indirectly pay or declare any dividend or make any distribution upon (other than a dividend or distribution described in Section 6 or dividends due and paid in the ordinary course on preferred stock of the Corporation at such times when the Corporation is in compliance with its payment and other obligations hereunder), nor shall any distribution

be made in respect of, any Junior Securities as long as any dividends due on the Preferred Stock remain unpaid, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities or shares pari passu with the Preferred Stock.

Section 4. Voting Rights. Except as otherwise provided herein or as otherwise required by law, the Preferred Stock shall have no voting rights. However, as long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Liquidation (as defined in Section 5) senior to, or otherwise pari passu with, the Preferred Stock, (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the Holders, (d) increase the number of authorized shares of Preferred Stock, or (e) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “Liquidation”), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation an amount equal to the Stated Value, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under this Certificate of Designation, for each share of Preferred Stock before any distribution or payment shall be made to the holders of any Junior Securities, and if the assets of the Corporation shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders shall be ratably distributed among the Holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time and from time to time from and after the applicable Issue Date at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d) and Section 6(e)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a “Notice of Conversion”). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile such Notice of Conversion to the Corporation (such date, the “Conversion Date”). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall

any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Preferred Stock shall equal \$5.80, subject to adjustment herein (the “Conversion Price”). In addition, in the event that a Qualified Offering has not been consummated on or before the six month anniversary of the First Closing Date, on both (i) the six month anniversary of the First Closing Date and (ii) six month anniversary of the Second Closing Date (each such date, a “Trigger Date”), the Conversion Price shall be reduced, and only reduced, to the lesser of (x) the then Conversion Price, as adjusted, (y) \$3.00 (subject to adjustment for forward and reverse stock splits and the like) and (z) the lowest VWAP for any Trading Day during the five Trading Days immediately following each such Trigger Date (the “Reset Conversion Price”, which shall thereafter be the new Conversion Price, subject to further adjustment hereunder, and such five (5) Trading Day period shall be referred to herein as a “Measurement Period”). The Corporation shall notify each Holder of the adjustment to the Conversion Price as of such date (each a “Trigger Date Adjustment Notice”). For purposes of clarification, whether or not the Corporation provides a Trigger Date Adjustment Notice pursuant to this Section 6(b), each Holder shall receive a number of Conversion Shares and retain a number of shares of Preferred Stock based upon the Conversion Price as adjusted pursuant to this Section, regardless of whether a Holder accurately refers to such price or number of shares of Preferred Stock converted in any Notice of Conversion. Any adjustment to the Conversion Price pursuant to this Section shall be effective retroactively to the first Trading Day during each Measurement Period. Accordingly, with respect to Notices of Conversion effected during a Measurement Period, in the event the Conversion Price is reduced pursuant to this Section, within the two (2) Trading Days immediately following the end of such Measurement Period, the Corporation shall issue the applicable Holder additional Conversion Shares based on a Conversion Price equal to the Reset Conversion Price with respect to such Notices of Conversion.

c) Mechanics of Conversion.

i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the “Share Delivery Date”), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) the number of Conversion Shares being acquired upon the conversion of the Preferred Stock (including, if

the Corporation has given continuous notice pursuant to Section 3(b) for payment of dividends in shares of Common Stock at least 20 Trading Days prior to the date on which the Notice of Conversion is delivered to the Corporation, shares of Common Stock representing the payment of accrued dividends otherwise determined pursuant to Section 3(a) but assuming that the Dividend Notice Period is the 20 Trading Days period immediately prior to the date on which the Notice of Conversion is delivered to the Corporation and excluding for such issuance the condition that the Corporation deliver the Dividend Share Amount as to such dividend payment prior to the commencement of the Dividend Notice Period) which, on or after the six month anniversary of the applicable Issue Date, shall be free of restrictive legends and trading restrictions (other than those which may then be required by the Purchase Agreement), and (B) a bank check in the amount of accrued and unpaid dividends (if the Corporation has elected or is required to pay accrued dividends in cash). On or after the six month anniversary of the applicable Issue Date, the Corporation shall deliver the Conversion Shares required to be delivered by the Corporation under this Section 6 electronically through the Depository Trust Company or another established clearing corporation performing similar functions. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Corporation’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion.

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

iii. Obligation Absolute; Partial Liquidated Damages. The Corporation’s obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or

all of the Stated Value of its Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or any one associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day and increasing to \$200 per Trading Day on the sixth Trading Day after such damages begin to accrue) for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

iv. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock

submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver the Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock and payment of dividends on the Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Purchase Agreement) be then accrued but unpaid and issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock and payment of dividends then accrued but unpaid hereunder. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

vi. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share. Notwithstanding anything to the contrary contained herein, but consistent with the provisions of this subsection with respect to fractional Conversion Shares, nothing shall prevent any Holder from converting fractional shares of Preferred Stock.

vii. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of this Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

d) Beneficial Ownership Limitation. The Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock or the Warrants) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above

shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Corporation shall within one Trading Day confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

e) Issuance Limitations. Notwithstanding anything herein to the contrary, if the Corporation has not obtained Shareholder Approval, then the Corporation may not issue, upon conversion of the Preferred Stock, a number of shares of Common Stock which, when aggregated with any shares of Common Stock issued (i) in connection with any conversion of Preferred Stock issued pursuant to the Purchase Agreement, (ii) in connection with the exercise of any Warrants issued pursuant to the Purchase Agreement and (iii) in connection with the exercise of any warrants issued to any registered broker-dealer as a fee in connection with the issuance of the Securities pursuant to the Purchase Agreement, would exceed 1,196,680 shares of Common Stock (subject to adjustment for forward and reverse stock splits, recapitalizations and the like) (such number of shares, the "Issuable Maximum"). Each Holder shall be entitled to a portion of the Issuable Maximum equal to the quotient obtained by dividing (x) the Stated Value of such Holder's Preferred Stock issued or issuable pursuant to the Purchase Agreement by (y)

the aggregate Stated Value of all Preferred Stock issued or issuable to all Holders pursuant to the Purchase Agreement. In addition, each Holder may allocate its pro-rata portion of the Issuable Maximum among Preferred Stock and Warrants held by it in its sole discretion. Such portion shall be adjusted upward ratably in the event a Holder no longer holds any Preferred Stock or Warrants and the amount of shares issued to such Holder pursuant to such Holder's Preferred Stock and Warrants was less than such Holder's pro-rata share of the Issuable Maximum. For avoidance of doubt, unless and until any required Shareholder Approval is obtained and effective, warrants issued to any registered broker-dealer as a fee in connection with the Securities issued pursuant to the Purchase Agreement as described in clause (iii) above shall provide that such warrants shall not be allocated any portion of the Issuable Maximum and shall be unexercisable unless and until such Shareholder Approval is obtained and effective.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. From the Original Issue Date until a Qualified Offering has been consummated, and any adjustment pursuant to this Section 7(b) has been made as a result of the Qualified Offering, if the Corporation or any Subsidiary, as applicable sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Conversion Price (such lower price, the "Base Conversion Price" and such issuances, collectively, a "Dilutive Issuance") (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection

with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 7(b) in respect of an Exempt Issuance. If the Corporation enters into a Variable Rate Transaction, despite the prohibition set forth in the Purchase Agreement, the Corporation shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible conversion price at which such securities may be converted or exercised. The Corporation shall notify the Holders in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 7(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the “Dilutive Issuance Notice”). For purposes of clarification, whether or not the Corporation provides a Dilutive Issuance Notice pursuant to this Section 7(b), upon the occurrence of any Dilutive Issuance, the Holders are entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether a Holder accurately refers to the Base Conversion Price in the Notice of Conversion.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the “Purchase Rights”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder’s Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off,

reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction . If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of this Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) and Section 6(e) on the conversion of this Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is

convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) and Section 6(e) on the conversion of this Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents (as defined in the Purchase Agreement) in accordance with the provisions of this Section 7(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Preferred Stock, deliver to the Holder in exchange for this Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Preferred Stock (without regard to any limitations on the conversion of this Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.

f) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

g) Notice to the Holders.

i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder by facsimile or email a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

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

Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of this Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. Miscellaneous.

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

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages, accrued dividends and accrued interest, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflict of laws thereof. All legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the “New York Courts”). The Corporation and each Holder hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. The Corporation and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. The Corporation and each Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designation or the transactions contemplated hereby. If the Corporation or any Holder shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys’ fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

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

f) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

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

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

i) Status of Converted or Redeemed Preferred Stock. Shares of Preferred Stock may only be issued pursuant to the Purchase Agreement. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series A 20% Convertible Preferred Stock.

RESOLVED, FURTHER, that the Chairman, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Delaware law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this 8th day of March 2018.

/s/ Angelos M. Stergiou

Name: Angelos M. Stergiou, MD, ScD h.c.

Title: President & Chief Executive Officer

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES OF PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series A 20% Convertible Preferred Stock indicated below into shares of common stock, par value \$0.0001 per share (the "Common Stock"), of SELLAS Life Sciences Group, Inc., a Delaware corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Purchase Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: _____

Number of shares of Preferred Stock owned prior to Conversion: _____

Number of shares of Preferred Stock to be Converted: _____

Stated Value of shares of Preferred Stock to be Converted: _____

Number of shares of Common Stock to be Issued: _____

Applicable Conversion Price: _____

Number of shares of Preferred Stock subsequent to Conversion: _____

Address for Delivery: _____

or

DWAC Instructions:

Broker no: _____

Account no: _____

[HOLDER]

By: _____

Name:

Title:

ZQ|CERT#|COY|CL|S|RG|STRY|ACCT#|TRANSTYPE|RUN|H|TRANS#

SELLAS
LIFE SCIENCES GROUP

SELLAS LIFE SCIENCES GROUP, INC.
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

MR. SAMPLE & MRS. SAMPLE &
MR. SAMPLE & MRS. SAMPLE

*****ZERO HUNDRED THOUSAND
ZERO HUNDRED AND ZERO*****

FULLY-PAID AND NON-ASSESSABLE SHARES OF THE COMMON STOCK OF
SELLAS LIFE SCIENCES GROUP, INC. (hereinafter called the "Company"), transferable on the books of the
Company in person or by duly authorized attorney, upon surrender of this Certificate property endorsed. This
Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the
Amended and Restated Certificate of Incorporation, as amended, and the Amended and Restated By-Laws, as
amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of
which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and
registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

Dated: **06-14-2006**
COUNTERSIGNED AND REGISTERED BY:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR

President & Chief Executive Officer
Corporate Secretary

SECURITY INSTRUCTIONS ON REVERSE

COMMON STOCK
PAR VALUE \$0.001

COMMON STOCK
SHARES

CUSIP **81642T 10 0**
SEE REVERSE FOR CERTAIN DEFINITIONS

THIS CERTIFICATE IS TRANSFERABLE IN
CITIES DESIGNATED BY THE TRANSFER
AGENT AVAILABLE ONLINE AT
www.computershare.com

Certificate Number
Z000000000

Shares

1234567



PO BOX 43094, Providence, RI 02940-3094

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4



CUSIP XXXXXX XX X
Holder ID XXXXXXXXXXXX
Insurance Value 1,000,000.00
Number of Shares 123456
DTC 12345678 123456789012345

Certificate Numbers	Num/No.	Denom.	Total
1234567890/1234567890	1	1	1
1234567890/1234567890	2	2	2
1234567890/1234567890	3	3	3
1234567890/1234567890	4	4	4
1234567890/1234567890	5	5	5
1234567890/1234567890	6	6	6
Total Transaction			7

SELLAS LIFE SCIENCES GROUP, INC.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT-Custodian
		(Cust)	(Minor)
TEN ENT	- as tenants by the entireties		under Uniform Gifts to Minors Act
			(State)
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACTCustodian (until age. . .)
		(Cust)	(Minor)
			under Uniform Transfers to Minors Act.
			(State)

Additional abbreviations may also be used though not in the above list.

For value received, _____ hereby sell, assign and transfer unto _____ PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____ Shares
 of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint _____ Attorney
 to transfer the said stock on the books of the within-named Corporation with full power of substitution in the premises.

Dated: _____ 20_____
 Signature: _____
 Signature: _____

Signature(s) Guaranteed: Medallion Guarantee Stamp
THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

SECURITY INSTRUCTIONS

THIS WATERMARKED PAPER, DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.



The IRS requires that we report the cost basis of certain shares acquired after January 1, 2011. If your shares were covered by the legislation and you have sold or transferred the shares and requested a specific cost basis calculation method, we have processed as requested. If you did not specify a cost basis calculation method, we have defaulted to the first in, first out (FIFO) method. Please visit our website or consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with us or do not have any activity in your account for the time periods specified by state law, your property could become subject to state unclaimed property laws and transferred to the appropriate state.

1534201

Incentive Stock Option
Granted Under Galena Biopharma 2016 Incentive Plan

1. Grant of Option.

This certificate evidences an incentive stock option (this "Stock Option") granted by Galena Biopharma, Inc., a Delaware corporation (the "Company"), [MMDD, YYYY] (the "Date of Grant") to _____, an employee of the Company (the "Participant") pursuant to the Company's 2016 Incentive Plan (as from time to time in effect, the "Plan"). Under this Stock Option, the Participant may purchase, in whole or in part, on the terms herein provided, a total of _____ shares of common stock of the Company (the "Shares") at \$ _____ per Share, which is not less than the fair market value of the Shares on the Date of Grant. The latest date on which this Stock Option, or any part thereof, may be exercised is [MMDD, YYYY] (the "Final Exercise Date"). The Stock Option evidenced by this certificate is intended to be an incentive stock option as defined in section 422 of the Internal Revenue Code of 1986, as amended from time to time (the "Code").

- This Stock Option shall vest and become exercisable in equal _____ installments over _____ years beginning _____ months after the Grant Date.

Notwithstanding the foregoing, upon termination of the Participant's Employment, any portion of this Stock Option that is not then exercisable will immediately expire and the remainder of this Stock Option will remain exercisable for three months (unless termination of the Participant's Employment resulted from reasons that in the determination of the Administrator cast such discredit on the Participant as to justify immediate forfeiture of this Stock Option, in which case this entire Option shall immediately expire and no portion thereof shall remain exercisable); *provided*, that any portion of this Stock Option held by the Participant immediately prior to the Participant's death, to the extent then exercisable, will remain exercisable for one year following the Participant's death; *and further provided*, that in no event shall any portion of this Stock Option be exercisable after the Final Exercise Date.

2. Exercise of Stock Option.

Each election to exercise this Stock Option shall be in writing, signed by the Participant or the Participant's executor, administrator, or legally appointed representative (in the event of the Participant's incapacity) or the person or persons to whom this Stock Option is transferred by will or the applicable laws of descent and distribution (collectively, the "Option Holder"), and received by the Company at its principal office, accompanied by this certificate and payment in full as provided in the Plan. Subject to the further terms and conditions provided in the Plan, the purchase price may be paid as follows: (i) by delivery of cash or check acceptable to the Administrator; (ii) upon and following an initial public offering of the Company and to the extent permitted by applicable law (as determined by

the Administrator), through a broker-assisted exercise program acceptable to the Administrator; or (iii) through any combination of the foregoing. In the event that this Stock Option is exercised by an Option Holder other than the Participant, the Company will be under no obligation to deliver Shares hereunder unless and until it is satisfied as to the authority of the Option Holder to exercise this Stock Option.

3. Notice of Disposition.

The person exercising this Stock Option shall notify the Company when making any disposition of the Shares acquired upon exercise of this Stock Option, whether by sale, gift or otherwise.

4. Restrictions on Transfer of Shares.

If at the time this Stock Option is exercised the Company or any of its stockholders is a party to any agreement restricting the transfer of any outstanding shares of the Company's common stock, the Administrator may provide that this Stock Option may be exercised only if the Shares so acquired are made subject to the transfer restrictions set forth in that agreement (or if more than one such agreement is then in effect, the agreement or agreements specified by the Administrator).

If requested by the Corporation and the managing underwriter of an offering by the Corporation of Common Stock pursuant to a registration statement under the Securities Act of 1933, as amended, each stockholder who acquires shares by exercise of this Option shall agree, by executing and delivering such form of agreement as the Company and such underwriter shall reasonably request, not to sell publicly or otherwise transfer or dispose of any shares held by such stockholder or other securities of the Corporation held by such stockholder for a specified period of time (not to exceed 180 days) immediately following the effective date of such registration statement; *provided*, that such agreement shall apply only to the initial public offering of the Corporation's securities.

5. Withholding Agreement to Provide Security.

If at the time this Stock Option is exercised the Company determines that under applicable law and regulations it could be liable for the withholding of any federal or state tax upon exercise or with respect to a disposition of any Shares acquired upon exercise of this Stock Option, this Stock Option may not be exercised unless the person exercising this Stock Option remits to the Company any amounts determined by the Company to be required to be withheld upon exercise (or makes other arrangements satisfactory to the Company for the payment of such taxes) and gives such security as the Company deems adequate to meet its potential liability for the withholding of tax upon a disposition of the Shares and agrees to augment such security from time to time in any amount reasonably determined by the Company to be necessary to preserve the adequacy of such security.

6. Nontransferability of Stock Option.

This Stock Option is not transferable by the Participant otherwise than by will or the laws of descent and distribution and is exercisable during the Participant's lifetime only by the Participant (or in the event of the Participant's incapacity, the person or persons legally appointed to act on the Participant's behalf).

7. Provisions of the Plan.

This Stock Option is subject to the provisions of the Plan, which are incorporated herein by reference. A copy of the Plan as in effect on the date of the grant of this Stock Option has been furnished to the Participant. By exercising all or any part of this Stock Option, the Participant agrees to be bound by the terms of the Plan and this certificate. All initially capitalized terms used herein will have the meaning specified in the Plan, unless another meaning is specified herein.

IN WITNESS WHEREOF, the Company has caused this instrument to be executed by its duly authorized officer.

Galena Biopharma, Inc.

By: _____

Name: _____

Title: _____

Acknowledged

Nonstatutory Stock Option
Granted Under Galena Biopharma, Inc. 2016 Incentive Plan

1. Grant of Option; Vesting.

This certificate evidences a nonstatutory stock option (this "Stock Option") granted by Galena Biopharma, Inc., a Delaware corporation (the "Company"), [MMDD, YYYY] (the "Date of Grant") to _____, (the "Participant") pursuant to the Company's 2016 Incentive Plan (as from time to time in effect, the "Plan"). Under this Stock Option, the Participant may purchase, in whole or in part, on the terms herein provided, a total of _____ shares of common stock of the Company (the "Shares") at \$ _____ per share, which is not less than the fair market value of the Shares on the Date of Grant. The latest date on which this Stock Option, or any part thereof, may be exercised is [MMDD, YYYY] (the "Final Exercise Date"). The Stock Option evidenced by this certificate is intended to be, and is hereby designated, a nonstatutory option, that is, an option that does *not* qualify as an incentive stock option as defined in section 422 of the Internal Revenue Code of 1986, as amended from time to time (the "Code").

This Stock Option shall vest and become exercisable in equal amounts of [XXX] options per month for ____ months, such that the grant will be fully exercisable on [MMDD, YYYY].

Notwithstanding any other provision of this Stock Option, upon termination of the Participant's contractual relationship, any portion of this Stock Option that is not then exercisable will promptly expire and the remainder of this Stock Option will remain exercisable for three months unless the Participant's service as a consultant is terminated for cause, this entire Stock Option shall immediately expire and no portion thereof shall remain exercisable. In addition, in no event shall any portion of this Stock Option be exercisable after the Final Exercise Date.

2. Exercise of Stock Option.

Each election to exercise this Stock Option shall be in writing, signed by the Participant or the Participant's executor, administrator, or legally appointed representative (in the event of the Participant's incapacity) or the person or persons to whom this Stock Option is transferred by will or the applicable laws of descent and distribution (collectively, the "Option Holder"), and received by the Company at its principal office, accompanied by this certificate and payment in full as provided in the Plan. Subject to the further terms and conditions provided in the Plan, the purchase price may be paid as follows: (i) by delivery of cash or check acceptable to the Administrator; (ii) upon and following the registration of the common stock of the Company under the Securities and Exchange Act of 1934 and to the extent permitted by applicable law (as determined by the Administrator), through a broker-assisted exercise program acceptable to the Administrator; or (iii) through the delivery of shares of common stock of the Company that have been outstanding for at least six months and that have a fair market value equal to the exercise price; or (iv) through any combination of the foregoing. In the event that this Stock Option is exercised by an Option Holder other than the Participant, the Company will be under no obligation to deliver Shares hereunder unless and until it is satisfied as to the authority of the Option Holder to exercise this Stock Option.

3. Restrictions on Transfer of Shares.

If at the time this Stock Option is exercised the Company or any of its shareholders is a party to any agreement restricting the transfer of any outstanding shares of the Company's common stock, the Administrator may provide that this Stock Option may be exercised only if the Shares so acquired are made subject to the transfer restrictions set forth in that agreement (or if more than one such agreement is then in effect, the agreement or agreements specified by the Administrator).

4. Withholding Agreement to Provide Security.

If at the time this Stock Option is exercised the Company determines that under applicable law and regulations it could be liable for the withholding of any federal or state tax upon exercise or with respect to a disposition of any Shares acquired upon exercise of this Stock Option, this Stock Option may not be exercised unless the person exercising this Stock Option remits to the Company any amounts determined by the Company to be required to be withheld upon exercise (or makes other arrangements satisfactory to the Company for the payment of such taxes) and gives such security as the Company deems adequate to meet its potential liability for the withholding of tax upon a disposition of the Shares and agrees to augment such security from time to time in any amount reasonably determined by the Company to be necessary to preserve the adequacy of such security.

5. Nontransferability of Stock Option.

This Stock Option is not transferable by the Participant otherwise than by will or the laws of descent and distribution, and is exercisable during the Participant's lifetime only by the Participant (or in the event of the Participant's incapacity, the person or persons legally appointed to act on the Participant's behalf).

6. Provisions of the Plan.

This Stock Option is subject to the provisions of the Plan, which are incorporated herein by reference. A copy of the Plan and prospectus as in effect on the date of the grant of this Stock Option has been furnished to the Participant. By exercising all or any part of this Stock Option, the Participant agrees to be bound by the terms of the Plan and this certificate. All initially capitalized terms used herein will have the meaning specified in the Plan, unless another meaning is specified herein.

IN WITNESS WHEREOF, the Company has caused this instrument to be executed by its duly authorized officer.

Galena Biopharma, Inc.

By: _____

Name: _____

Title: _____

Acknowledged

SELLAS LIFE SCIENCES GROUP, INC.

RESTRICTED STOCK UNIT GRANT NOTICE
(2017 EQUITY INCENTIVE PLAN)

SELLAS Life Sciences Group, Inc. (the "Company"), pursuant to its 2017 Equity Incentive Plan (the "Plan"), hereby awards to Participant a Restricted Stock Unit Award for the number of shares of the Company's Common Stock ("Restricted Stock Units") set forth below (the "Award"). The Award is subject to all of the terms and conditions as set forth in this notice of grant (this "Restricted Stock Unit Grant Notice"), and in the Plan and the Restricted Stock Unit Award Agreement (the "Award Agreement"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein shall have the meanings set forth in the Plan or the Award Agreement. In the event of any conflict between the terms in this Restricted Stock Unit Grant Notice or the Award Agreement and the Plan, the terms of the Plan shall control.

Participant: _____
Date of Grant: _____
Vesting Commencement Date: _____
Number of Restricted Stock Units: _____

Vesting Schedule: [_____, subject to Participant's Continuous Service through each such vesting date.]

Issuance Schedule: Subject to any Capitalization Adjustment, one share of Common Stock (or its cash equivalent, at the discretion of the Company) will be issued for each Restricted Stock Unit that vests at the time set forth in Section 6 of the Award Agreement.

Additional Terms/Acknowledgements: Participant acknowledges receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan. Participant acknowledges and agrees that this Restricted Stock Unit Grant Notice and the Award Agreement may not be modified, amended, or revised except as provided in the Plan. Participant further acknowledges that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the acquisition of the Common Stock pursuant to the Award specified above and supersede all prior oral and written agreements on the terms of this Award, with the exception, if applicable, of (i) equity awards previously granted and delivered to Participant, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment or severance arrangement or other written agreement entered into between the Company and Participant specifying the terms that should govern this Award upon the terms and conditions set forth therein.

By accepting this Award, Participant acknowledges having received and read the Restricted Stock Unit Grant Notice, the Award Agreement and the Plan and agrees to all of the terms and conditions set forth in these documents. Participant consents to receive Plan and related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

SELLAS LIFE SCIENCES GROUP, INC.

PARTICIPANT

By: _____
Signature

By: _____
Signature

Title: _____

Date: _____

Date: _____

ATTACHMENTS : Award Agreement and 2017 Equity Incentive Plan

ATTACHMENT I

SELLAS LIFE SCIENCES GROUP, INC.

2017 EQUITY INCENTIVE PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the “*Grant Notice*”) and this Restricted Stock Unit Award Agreement (the “*Agreement*”), SELLAS Life Sciences Group, Inc. (the “*Company*”) has awarded you (“*Participant*”) a Restricted Stock Unit Award (the “*Award*”) pursuant to the Company’s 2017 Equity Incentive Plan (the “*Plan*”) for the number of Restricted Stock Units/shares indicated in the Grant Notice. Capitalized terms not explicitly defined in this Agreement or the Grant Notice shall have the same meanings given to them in the Plan. The terms of your Award, in addition to those set forth in the Grant Notice, are as follows.

1. GRANT OF THE AWARD. This Award represents the right to be issued on a future date one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 below) as indicated in the Grant Notice. As of the Date of Grant, the Company will credit to a bookkeeping account maintained by the Company for your benefit (the “*Account*”) the number of Restricted Stock Units/shares of Common Stock subject to the Award. Notwithstanding the foregoing, the Company reserves the right to issue you the cash equivalent of Common Stock, in part or in full satisfaction of the delivery of Common Stock in connection with the vesting of the Restricted Stock Units, and, to the extent applicable, references in this Agreement and the Grant Notice to Common Stock issuable in connection with your Restricted Stock Units will include the potential issuance of its cash equivalent pursuant to such right. This Award was granted in consideration of your services to the Company.

2. VESTING. Subject to the limitations contained herein, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice. Vesting will cease upon the termination of your Continuous Service and the Restricted Stock Units credited to the Account that were not vested on the date of such termination will be forfeited at no cost to the Company and you will have no further right, title or interest in or to such Award or the shares of Common Stock to be issued in respect of such portion of the Award.

3. NUMBER OF SHARES. The number of Restricted Stock Units subject to your Award may be adjusted from time to time for Capitalization Adjustments, as provided in the Plan. Any additional Restricted Stock Units, shares, cash or other property that becomes subject to the Award pursuant to this Section 3, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units and shares covered by your Award. Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock shall be created pursuant to this Section 3. Any fraction of a share will be rounded down to the nearest whole share.

4. SECURITIES LAW COMPLIANCE. You may not be issued any Common Stock under your Award unless the shares of Common Stock underlying the Restricted Stock Units are either (i) then registered under the Securities Act, or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Your Award must also comply with other applicable laws and regulations governing the Award, and you shall not receive such Common Stock if the Company determines that such receipt would not be in material compliance with such laws and regulations.

5. TRANSFER RESTRICTIONS. Prior to the time that shares of Common Stock have been delivered to you, you may not transfer, pledge, sell or otherwise dispose of this Award or the shares issuable in respect of your Award, except as expressly provided in this Section 5. For example, you may not use shares that may be issued in respect of your Restricted Stock Units as security for a loan. The restrictions on transfer set forth herein will lapse upon delivery to you of shares in respect of your vested Restricted Stock Units.

(a) Death. Your Award is transferable by will and by the laws of descent and distribution. At your death, vesting of your Award will cease and your executor or administrator of your estate shall be entitled to receive, on behalf of your estate, any Common Stock or other consideration that vested but was not issued before your death.

(b) Domestic Relations Orders. Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your right to receive the distribution of Common Stock or other consideration hereunder, pursuant to a domestic relations order, marital settlement agreement or other divorce or separation instrument as permitted by applicable law that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this Award with the Company General Counsel prior to finalizing the domestic relations order or marital settlement agreement to verify that you may make such transfer, and if so, to help ensure the required information is contained within the domestic relations order or marital settlement agreement.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation set forth in Section 11 of this Agreement, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an “**Original Issuance Date**”.

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:

(i) the Original Issuance Date does not occur (1) during an “open window period” applicable to you, as determined by the Company in accordance with the Company’s then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company’s policies (a “**10b5-1 Arrangement**”)), and

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a “same day sale” commitment with a broker-dealer pursuant to Section 11 of this Agreement (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) The form of delivery (e.g. , a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

7. DIVIDENDS . You shall receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.

8. RESTRICTIVE LEGENDS . The shares of Common Stock issued in respect of your Award shall be endorsed with appropriate legends as determined by the Company.

9. EXECUTION OF DOCUMENTS . You hereby acknowledge and agree that the manner selected by the Company by which you indicate your consent to your Grant Notice is also deemed to be your execution of your Grant Notice and of this Agreement. You further agree that such manner of indicating consent may be relied upon as your signature for establishing your execution of any documents to be executed in the future in connection with your Award.

10. AWARD NOT A SERVICE CONTRACT .

(a) Nothing in this Agreement (including, but not limited to, the vesting of your Award or the issuance of the shares in respect of your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Agreement or the Plan shall: (i) confer upon you any right to continue in the employ or service of, or affiliation with, the Company or an Affiliate; (ii) constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Agreement or Plan; or (iv) deprive the Company of the right to terminate you at will and without regard to any future vesting opportunity that you may have.

(b) By accepting this Award, you acknowledge and agree that the right to continue vesting in the Award pursuant to the vesting schedule provided in the Grant Notice may not be earned unless (in addition to any other conditions described in the Grant Notice and this Agreement) you continue as an employee, director or consultant at the will of the Company and affiliate, as applicable (not through the act of being hired, being granted this Award or any other award or benefit) and that the Company has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Affiliates at any time or from time to time, as it deems appropriate (a "**reorganization** "). You acknowledge and agree that such a reorganization could result in the termination of your Continuous Service, or the termination of Affiliate status of your employer and the loss of benefits available to you under this Agreement, including but not limited to, the termination of the right to continue vesting in the Award. You further acknowledge and agree that this Agreement, the Plan, the transactions contemplated

hereunder and the vesting schedule set forth herein or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant for the term of this Agreement, for any period, or at all, and shall not interfere in any way with the Company's right to terminate your Continuous Service at any time, with or without your cause or notice, or to conduct a reorganization.

11. WITHHOLDING OBLIGATION .

(a) On each vesting date, and on or before the time you receive a distribution of the shares of Common Stock in respect of your Restricted Stock Units, and at any other time as reasonably requested by the Company in accordance with applicable tax laws, you hereby authorize any required withholding from the Common Stock issuable to you and/or otherwise agree to make adequate provision, including in cash, for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or any Affiliate that arise in connection with your Award (the "**Withholding Obligation**").

(b) By accepting this Award, you acknowledge and agree that the Company or any Affiliate may, in its sole discretion, satisfy all or any portion of the Withholding Obligation relating to your Restricted Stock Units by any of the following means or by a combination of such means: (i) causing you to pay any portion of the Withholding Obligation in cash; (ii) withholding from any compensation otherwise payable to you by the Company; (iii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with the Award with a Fair Market Value (measured as of the date shares of Common Stock are issued pursuant to Section 6) equal to the amount of such Withholding Obligation; provided, however, that the number of such shares of Common Stock so withheld will not exceed the amount necessary to satisfy the Withholding Obligation using the maximum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income; and *provided*, further, that to the extent necessary to qualify for an exemption from application of Section 16(b) of the Exchange Act, if applicable, such share withholding procedure will be subject to the express prior approval of the Board or the Company's Compensation Committee; and/or (iv) permitting or requiring you to enter into a "same day sale" commitment, if applicable, with a broker-dealer that is a member of the Financial Industry Regulatory Authority (a "**FINRA Dealer**"), pursuant to this authorization and without further consent, whereby you irrevocably elect to sell a portion of the shares to be delivered in connection with your Restricted Stock Units to satisfy the Withholding Obligation and whereby the FINRA Dealer irrevocably commits to forward the proceeds necessary to satisfy the Withholding Obligation directly to the Company and/or its Affiliates. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock or any other consideration pursuant to this Award.

(c) In the event the Withholding Obligation arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

12. TAX CONSEQUENCES . The Company has no duty or obligation to minimize the tax consequences to you of this Award and shall not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax, financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so. You understand that you (and not the Company) shall be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

13. UNSECURED OBLIGATION . Your Award is unfunded, and as a holder of a vested Award, you shall be considered an unsecured creditor of the Company with respect to the Company's obligation, if any, to issue shares or other property pursuant to this Agreement. You shall not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this Agreement until such shares are issued to you pursuant to Section 6 of this Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

14. NOTICES . Any notice or request required or permitted hereunder shall be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this Award by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this Award, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

15. HEADINGS . The headings of the Sections in this Agreement are inserted for convenience only and shall not be deemed to constitute a part of this Agreement or to affect the meaning of this Agreement.

16. MISCELLANEOUS .

(a) The rights and obligations of the Company under your Award shall be transferable by the Company to any one or more persons or entities, and all covenants and agreements hereunder shall inure to the benefit of, and be enforceable by, the Company's successors and assigns.

(b) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award.

(c) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(d) This Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Agreement shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

17. GOVERNING PLAN DOCUMENT . Your Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd-Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any

compensation recovery policy otherwise required by applicable law. No recovery of compensation under such a clawback policy will be an event giving rise to a right to voluntarily terminate employment upon a resignation for “good reason,” or for a “constructive termination” or any similar term under any plan of or agreement with the Company.

18. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS. The value of the Award subject to this Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating benefits under any employee benefit plan (other than the Plan) sponsored by the Company or any Affiliate except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any or all of the employee benefit plans of the Company or any Affiliate.

19. SEVERABILITY. If all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

20. OTHER DOCUMENTS. You hereby acknowledge receipt or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act. In addition, you acknowledge receipt of the Company’s policy permitting certain individuals to sell shares only during certain “window” periods and the Company’s insider trading policy, in effect from time to time.

21. AMENDMENT. This Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Company. Notwithstanding the foregoing, this Agreement may be amended solely by the Board by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to you, and provided that, except as otherwise expressly provided in the Plan, no such amendment materially adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Board reserves the right to change, by written notice to you, the provisions of this Agreement in any way it may deem necessary or advisable to carry out the purpose of the Award as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change shall be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.

22. COMPLIANCE WITH SECTION 409A OF THE CODE. This Award is intended to be exempt from the application of Section 409A of the Code, including but not limited to by reason of complying with the “short-term deferral” rule set forth in Treasury Regulation Section 1.409A-1(b)(4) and any ambiguities herein shall be interpreted accordingly. Notwithstanding the foregoing, if it is determined that the Award fails to satisfy the requirements of the short-term deferral rule and is otherwise not exempt from, and determined to be deferred compensation subject to Section 409A of the Code, this Award shall comply with Section 409A to the extent necessary to avoid adverse personal tax consequences and any ambiguities herein shall be interpreted accordingly. If it is determined that the Award is deferred compensation subject to Section 409A and you are a “Specified Employee” (within the meaning set forth in Section 409A(a)(2)(B)(i) of the Code) as of the date of your “Separation from Service” (as defined in Section 409A), then the issuance of any shares that would otherwise be made upon the date of your Separation from Service or within the first six (6) months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the date that is six (6) months and one day after the date of the Separation from Service, with the balance of the shares issued thereafter

in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the shares is necessary to avoid the imposition of adverse taxation on you in respect of the shares under Section 409A of the Code. Each installment of shares that vests is intended to constitute a “separate payment” for purposes of Treasury Regulation Section 1.409A-2(b)(2).

* * * * *

This Restricted Stock Unit Award Agreement shall be deemed to be signed by the Company and the Participant upon the signing by the Participant of the Restricted Stock Unit Grant Notice to which it is attached.

A TTACHMENT II

2017 E Q U I T Y I N C E N T I V E P L A N

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 6, 2018 (the “Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and CVI INVESTMENTS, INC. (the “Holder”). This Agreement hereby supersedes and replaces that certain Warrant Exchange Agreement entered into by the Company and Holder effective as of the Effective Date (the “Original Agreement”), and the Original Agreement shall have no further force or effect from and after the execution of this Agreement.

RECITALS

WHEREAS, the Holder currently holds 99,333 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$232,440.00 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants and the Original Agreement in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).

c) If the Closing has not occurred by the third trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Notes (assuming for purposes hereof that (x) the Exchange Notes are convertible at the Alternate Conversion Price (as defined in the Notes) assuming a date of conversion as of the date hereof, (y) interest on the Notes shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Notes set forth in the Exchange Notes). Upon issuance or conversion in accordance with the Exchange Notes the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this Agreement. For purposes of this Agreement, (i) “Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) “Governmental Entity” means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation.** The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering.** Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or brokers’ commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney’s fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation.** Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the “SEC”) pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company’s officers or directors in their capacities as such.

h) **No Group.** The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement.** This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement.** On or before 8:30 a.m., New York City time, on March 9, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) Blue Sky. The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration.** None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing.** The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period.** For the purposes of Rule 144 and in reliance upon the advice of counsel, the Company acknowledges that (i) the holding period of the Exchange Note (and upon conversion of the Exchange Note, the Conversion Shares) may be tacked onto the holding period of the Warrants, (ii) the Company is not aware of any event reasonably likely to occur that would reasonably be expected to result in the New Securities becoming ineligible to be resold by the Holder pursuant to Rule 144 and (iii) in connection with any resale of any New Securities pursuant to Rule 144, the Holder shall solely be required to provide reasonable assurances that such New Securities are eligible for resale, assignment or transfer under Rule 144, which shall not include an opinion of Holder’s counsel. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the removal of legends, if any, or issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing.** To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization.** The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title.** The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering.** The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption.** Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate.** The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information.** The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors.** The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery.** The Holder shall have executed and delivered this Agreement.

b) **Covenants.** The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants.** The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants as well as the Original Agreement, to be exchanged for the Exchange Note.

d) **Representations and Warranties.** The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery.** The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants.** The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note.** The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties.** Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) If to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) Intentionally Omitted

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances.** Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries.** This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

CVI INVESTMENTS, INC.

By: /s/ Martin Kobinger

Name: Martin Kobinger

Title: Investment Manager

Address:

Email:

DWAC Instructions:

Account Number at DTC Participant (if applicable):

CONVERTIBLE PROMISSORY NOTE

\$232,440.00
New York, NY

February 6, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **CVI INVESTMENTS, INC.** or its assigns (“*Holder*”) the principal sum of **\$232,440.00** (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated as of February 6 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 6, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 5% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

(a) Conversion Right. Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**")) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate. The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "**Conversion Amount**" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "**Conversion Price**" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion.

(i) **Optional Conversion.** To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of

Common Stock issuable pursuant to such Conversion Notice) (the “**Share Delivery Deadline**”), the Company shall (1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder’s or its designee’s balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c) (iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted.

(ii) **Company’s Failure to Timely Convert.** If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company’s share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder’s designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder’s conversion of this Note (as the case may be) (a “**Conversion Failure**”), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a “**Buy-In**”), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder’s request and in the Holder’s discretion, either: (I) pay cash to the Holder in an amount equal to the Holder’s total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the “**Buy-In Price**”), at which point the Company’s obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder’s conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder’s designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder’s conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the “**Buy- InPayment Amount**”). Nothing shall limit

the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) **Registration; Book-Entry.** The Holder and the Company shall maintain records showing the Principal and Interest converted and/or Paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) **Limitations on Conversions.** The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share

Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the " **Excess Shares** ") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 4.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the " **Maximum Issuance** "); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion.

(i) General. At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "*Alternate Conversion* ", and the date of such Alternate Conversion, each, an "*Alternate Conversion Date* ") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "*Alternate Conversion Amount* ") into shares of Common Stock at the Alternate Conversion Price.

(ii) Mechanics of Alternate Conversion. On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with "Alternate Conversion Price" replacing "Conversion Price" for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) **Voluntary Adjustment by Company.** The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of each of the Notes to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder's sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys' fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an "*Event of Default*":

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company's (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction. The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the

other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights. If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “*Purchase Rights*”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events. In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “ *Corporate Event* ”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability. If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments. Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

Note: Page 11

17. Amending the Terms of this Note. The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

18. Notices; Currency; Payments.

(a) Notices. Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency. All dollar amounts referred to in this Note are in United States Dollars (“*U.S. Dollars*”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “*Exchange Rate*” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice. To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) **“Adjustment Right”** means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) **“Alternate Conversion Price”** means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the **“Alternate Conversion Measuring Period”**). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) **“Attribution Parties”** means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) **“Bloomberg”** means Bloomberg, L.P.

(e) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(t) **“Closing Bid Price”** and **“Closing Sale Price”** means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by

Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) **“Common Stock”** means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) **“Convertible Securities”** means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) **“Eligible Market”** means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) **“Fundamental Transaction”** means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business

combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(m) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(n) “**Principal Market**” means the Nasdaq Capital Market.

(o) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(p) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(q) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(r) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the

Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou
Name: Angelos Stergiou, M.D., ScD h.c.
Title: Chief Executive Officer

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 7, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and ANSON INVESTMENTS MASTER FUND LP (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 30,000 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for shares of Common Stock (the “Exchange Shares”), the number of which is the quotient of \$70,200.00 divided by the closing price of the Exchange Shares on the NASDAQ Capital Market on the Closing Date of the Exchange Shares in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Shares, and the Company agrees to issue and deliver the Exchange Shares to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”). By February 8, 2018, (i) the Company shall cause the transfer agent for the Common Stock to issue and deliver the Exchange Shares duly registered and freely tradable through the facilities of DTC by DWAC to the custodian and account provided to the Company in writing by the Holder and (ii) the Holder shall deliver and surrender or cause to be delivered and surrendered to the Company for cancellation the Warrants.

c) If the Closing has not occurred by February 6, 2018, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a material adverse effect on the business, properties, financial condition or results or operations of the Company (a “Material Adverse Effect”).

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Issuance and Delivery of the Exchange Shares.** The Exchange Shares have been duly authorized and, will be validly issued, fully paid and nonassessable. Assuming the Warrants were purchased by Holder in the Company’s offering of Common Stock and warrants made pursuant to the Company’s prospectus filed with the Securities and Exchange Commission (the “SEC”) pursuant to Rule 424(b)(5) on February 9, 2017 (the “Registered Offering”) and the Holder is not an “Affiliate” (as such term is defined in Rule 405 promulgated under the Securities Act of 1933, as amended (the “Securities Act”)) of the Company, the Exchange Shares will be issued to the Holder without legend and will be freely tradable by the Holder.

d) **Governmental Consents.** No consent, approval or authorization of or designation, declaration or filing with any governmental authority on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the Exchange Shares or the consummation of any other transaction contemplated by this Agreement.

e) **No Default or Violation .** The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect.

f) **Disclosure of Agreement.** The Company shall, on or before 8:30 a.m., New York City time, on February 13, 2018 file with the SEC a Current Report on Form 8-K disclosing all material terms of the transaction contemplated hereby (such Current Report on Form 8-K, the “8-K Filing”). From and after the filing of the 8-K Filing, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that is not disclosed in the 8-K Filing. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the filing of the 8-K Filing without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the filing of the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing.** To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization.** The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Encumbrances (as defined below). The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Encumbrances. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Encumbrances. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants. "Encumbrances" shall mean any security or other property interest or right, claim, lien, pledge, option, charge, security interest, contingent or conditional sale, or other title claim or retention agreement, interest or other right or claim of third parties, whether perfected or not perfected, voluntarily incurred or arising by operation of law, and including any agreement (other than this Agreement) to grant or submit to any of the foregoing in the future.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Registered Offering.

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate of the Company and has not been an Affiliate during the three months prior to the date hereof.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Shares, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and issuance and acquisition of the Exchange Shares constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Shares. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

(i) **Limitation on Resales** . For thirty (30) trading days following the Closing Date, the Holder shall not sell more than 2.0% of trading volume of Common Stock as reported by Bloomberg, LP for the applicable date of determination through open market sales through the NASDAQ Capital Market on any trading day in which the NASDAQ Capital Market is open for trading.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Shares and deliver the Exchange Shares to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Shares.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Shares shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(d) **Delivery of Exchange Shares**. The Company shall have delivered the Exchange Shares in accordance with the instructions provided pursuant to Section 1.b) hereof.

(e) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

d) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

e) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

f) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

g) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Shares.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

ANSON INVESTMENTS MASTER FUND LP

By: /s/ Amin Nathoo

Name: Amin Nathoo

Title: Advising Rep, Anson Advisors Inc.

Address: _____

E-Mail: _____

DWAC INSTRUCTIONS

Broker Name and DTC Number: _____

Account Number at DTC Participant
(if applicable): _____

HOLDER SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 8, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and SABBY HEALTHCARE MASTER FUND LTD and SABBY VOLATILITY WARRANT MASTER FUND LTD (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 83,333 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”) as shown on the attached Appendix A; and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a number of shares of Common Stock (the “Exchange Shares”) determined by the quotient of \$195,000.00 divided by the closing price of the Common Stock on the NASDAQ Capital Market on the Closing Date (such price, the “Closing Price”, and such price on the Closing Date, the “First Closing Price”), in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Shares, and the Company agrees to issue and deliver the Exchange Shares to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof, and in any event within 2 Trading Days of the date hereof (the “Closing Date”). At the Closing, (i) the Company shall cause the transfer agent for the Common Stock to issue and deliver the Exchange Shares duly registered and freely tradable through the facilities of DTC by DWAC to the custodian and account provided to the Company in writing by the Holder and (ii) the Holder shall instruct the transfer agent of the Company to surrender the Warrants to the Company for cancellation.

c) If the Closing has not occurred by February 8, 2018, this Agreement shall terminate; *provided, however*, that no such termination will affect the right of any party to sue for any breach by any other party (or parties) of their respective obligations hereunder.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a material adverse effect on the business, properties, financial condition or results or operations of the Company (a “Material Adverse Effect”).

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Issuance and Delivery of the Exchange Shares.** The Exchange Shares have been duly authorized and, will be validly issued, fully paid and nonassessable. Assuming the Warrants were purchased by Holder in the Company’s offering of Common Stock and warrants made pursuant to the Company’s prospectus filed with the Securities and Exchange Commission (the “SEC”) pursuant to Rule 424(b)(5) on February 9, 2017 (the “Registered Offering”) and the Holder is not an “Affiliate” (as such term is defined in Rule 405 promulgated under the Securities Act of 1933, as amended (the “Securities Act”)) of the Company, the Exchange Shares will be issued to the Holder without legend and will be freely tradable by the Holder.

d) **Governmental Consents.** No consent, approval or authorization of or designation, declaration or filing with any governmental authority on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the Exchange Shares or the consummation of any other transaction contemplated by this Agreement.

e) **No Default or Violation .** The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of

any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect.

f) **Disclosure of Agreement.** The Company shall, on or before 8:30 a.m., New York City time, on February 14, 2018 file with the SEC a Current Report on Form 8-K disclosing all material terms of the transactions contemplated hereby (such Current Report on Form 8-K, the “8-K Filing”). From and after the earlier of (i) the time that a public announcement of certain material non-public information in possession of the Holder is made public (“Other MNPI”) and (ii) February 21, 2018 (“Cleansing Time”), the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents. After the date hereof, other than the contents of the Form 8-K and the Other MNPI, the Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company without the express written consent of the Holder. To the extent that the Company delivers any such material, non-public information to the Holder without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective following the Cleansing Time, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company. Notwithstanding anything herein to the contrary, in the event that the Closing Price on the date of the Cleansing Time is less than the First Closing Price, the Company shall issue additional shares of Common Stock to the Holder equal to the difference between what the Holder would have received if the Exchange Shares had been calculated using such Closing Price and the number of Exchange Shares issued on the Closing Date. Such shares shall be issued within 2 trading days of the date of the Cleansing Time.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Encumbrances (as defined below). The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Encumbrances. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Encumbrances. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants. "Encumbrances" shall mean any security or other property interest or right, claim, lien, pledge, option, charge, security interest, contingent or conditional sale, or other title claim or retention agreement, interest or other right or claim of third parties, whether perfected or not perfected, voluntarily incurred or arising by operation of law, and including any agreement (other than this Agreement) to grant or submit to any of the foregoing in the future.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Registered Offering.

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate of the Company and has not been an Affiliate during the three months prior to the date hereof.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Shares, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and issuance and acquisition of the Exchange Shares constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Shares. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

(i) **Limitation on Resales** . During the thirty (30) trading days following the Closing Date, on any trading day on which the NASDAQ Capital Market is open for trading, the Holder shall not sell, through open market sales on the NASDAQ Capital Market, a number of Exchange Shares in excess of 2.0% of the trading volume of Common Stock as reported by Bloomberg, LP for the applicable trading day.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Shares and deliver the Exchange Shares to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Shares.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Shares shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Shares.** The Company shall have delivered the Exchange Shares in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties.** Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

(c) **Most Favored Nations .** The Company covenants and agrees that it has not entered into a warrant exchange agreement with any other holder of Warrants of the Registered Offering (“Other Holder”) for any material amendments, modifications or exchanges to the terms of such Warrants (or settlement or exchange of such Warrants for other material consideration) (each a “More Favorable Agreement”), that is more favorable to such Other Holder than those of the Holder pursuant to this Agreement (it being understood that the pricing formula used to determine the number of shares of Common Stock issuable in any More Favorable Agreement may be based

on 100% of the then market price (using substantially the same formula hereunder), even if the price goes down (but not including any other consideration that may be granted or other type of security, if used)). If the Company enters into a More Favorable Agreement with terms that are materially different from this Agreement (“material” shall be in the reasonable determination of the Holder), then (i) the Company shall provide written notice thereof to the Holder promptly following the occurrence thereof and (ii) the terms and conditions of this Agreement that shall be, without any further action by the Holder or the Company, automatically and retroactively to the date hereof, amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of such more favorable material terms and/or conditions (as the case may be) set forth in such More Favorable Agreement, provided that upon written notice to the Company within five business days of such Company’s written notice, the Holder may elect not to accept the benefit of any such amended or modified material term or condition, in which event the material term or condition contained in this Agreement shall continue to apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this paragraph shall apply similarly and equally to each More Favorable Agreement shall be effective whether or not the Holder holds Exchange Shares at such time. The Company shall not enter into any More Favorable Agreement that would obligate the Company (after taking into consideration this clause b)) to issue to the Holder and the Other Holders, in the aggregate, a number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date hereof. The Company will notify the Holder any time it enters into any agreement with any Other Holder relating to the Warrants and, at the request of the Holder, provide the Holder with such agreement for its review.

c) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

d) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

e) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

f) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

g) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Shares.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

SABBY VOLATILITY WARRANT MASTER FUND LTD

By: /s/ Robert Grundstein
Name: /s/ Robert Grundstein
Title: COO of Purchaser's Investment Manager

Address: _____

E-Mail: _____

DWAC INSTRUCTIONS

Broker Name and DTC Number:

Account Number at DTC Participant
(if applicable): _____

SABBY HEALTHCARE MASTER FUND LTD

By: /s/ Robert Grundstein
Name: /s/ Robert Grundstein
Title: COO of Purchaser's Investment Manager

Address: _____

E-Mail: _____

DWAC INSTRUCTIONS

Broker Name and DTC Number:

Account Number at DTC Participant
(if applicable): _____

HOLDER SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

APPENDIX A

Warrants subject to Exchange

Common Stock Purchase Warrants of the Company to purchase up to 83,333 shares of common stock with an exercise price of \$36.30 and an expiration date of February 13, 2022.

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 9, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and HUDSON BAY MASTER FUND LTD (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 146,666 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$343,200.00 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).

c) If the Closing has not occurred by the second trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted,

and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Notes (assuming for purposes hereof that (x) the Exchange Notes are convertible at the Alternate Conversion Price (as defined in the Notes) assuming a date of conversion as of the date hereof, (y) interest on the Notes shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Notes set forth in the Exchange Notes). Upon issuance or conversion in accordance with the Exchange Notes the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this

Agreement. For purposes of this Agreement, (i) "Person" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) "Governmental Entity" means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation** . The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company's certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering** . Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation** . Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the "SEC") pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company's officers or directors in their capacities as such.

h) **No Group** . The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement** . This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement**. On or before 8:30 a.m., New York City time, on March 5, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) **Blue Sky** . The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration** . None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing** . The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period** . For the purposes of Rule 144 and in reliance upon the advice of counsel, the Company acknowledges that (i) the holding period of the Exchange Note (and upon conversion of the Exchange Note, the Conversion Shares) may be tacked onto the holding period of the Warrants, (ii) the Company is not aware of any event reasonably likely to occur that would reasonably be expected to result in the New Securities becoming ineligible to be resold by the Holder pursuant to Rule 144 and (iii) in connection with any resale of any New Securities pursuant to Rule 144, the Holder shall solely be required to provide reasonable assurances that such New Securities are eligible for resale, assignment or transfer under Rule 144, which shall not include an opinion of Holder’s counsel. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the removal of legends, if any, or issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Note.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note**. The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Most Favored Nations .** The Company hereby represents and warrants as of the date hereof and covenants and agrees that no agreement entered into (or to be entered into) with any Person with respect to the Exchange or other transaction involving the warrants issued in the Registered Offering, including, without limitation with respect to any consent, release, amendment, settlement, or waiver relating to any Exchange or such other transaction involving the warrants issued in the Registered Offering (each a “Settlement Document”), is or will be more favorable to such Person (other than any reimbursement of legal fees) than those of the Holder and this Agreement, including without limitation the ratio of warrants to the cash paid, principal amount of notes, value of any shares of Common Stock (valued as the VWAP of the Common Stock on the Trading Day immediately preceding the public announcement of such issuance), or value of any Options, Convertible Securities or Adjustment Rights (valued on the Trading Day immediately preceding the public announcement of such issuance, as the greater of (a) the VWAP of the Common Stock multiplied by the number of underlying shares and (b) the Black Scholes Consideration Value) conveyed in such Settlement Document. If, and whenever on or after the date hereof, the Company enters into a Settlement Document, then (i) the Company shall provide notice thereof to the Holder within one (1) Trading Day following the occurrence thereof and (ii) the terms and conditions of this Agreement shall be, without any further action by the Holder or the Company, automatically amended and modified in an

economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Settlement Document, provided that upon written notice to the Company within ten (10) Trading Days of receipt of notice of such Settlement Document the Holder may notify the Company in writing of Holder's election not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this Agreement shall apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this Section 7(c) shall apply similarly and equally to each Settlement Document. For purposes hereof, "Black Scholes Consideration Value" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances** . Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries** . This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

HUDSON BAY MASTER FUND LTD

By: /s/ George Antonopoulos

Name: George Antonopoulos

Title: Authorized Signatory

Address: c/o Hudson Bay Capital Management LP
777 Third Ave, 30th Fl
New York, NY 10017

E-Mail: investments@hudsonbaycapital.com

DWAC INSTRUCTIONS

Broker Name and DTC Number:

Account Number at DTC Participant
(if applicable): _____

EXHIBIT A

CONVERTIBLE PROMISSORY NOTE

\$343,200.00
New York, NY

February 9, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **HUDSON BAY MASTER FUND LTD** or its assigns (“*Holder*”) the principal sum of \$ **343,200.00** (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated February 9, 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 9, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 5% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

Note: Page 2.

(a) Conversion Right . Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**")) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate . The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "Conversion Amount" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "Conversion Price" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion .

(i) Optional Conversion . To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the "**Share Delivery Deadline**"), the Company shall (1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not

participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted.

(ii) Company's Failure to Timely Convert . If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder's designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of this Note (as the case may be) (a "**Conversion Failure**"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder's request and in the Holder's discretion, either: (I) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the "**Buy-In Payment Amount**"). Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) Registration; Book-Entry . The Holder and the Company shall maintain records showing the Principal and Interest converted and/or paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) Limitations on Conversions . The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the “ **Maximum Percentage** ”) of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the “ **Reported Outstanding Share Number** ”). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day

confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the "**Maximum Issuance**"); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion.

(i) General. At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "**Alternate Conversion**", and the date of such Alternate Conversion, each, an "**Alternate Conversion Date**") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price.

(ii) **Mechanics of Alternate Conversion.** On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with “Alternate Conversion Price” replacing “Conversion Price” for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) **Voluntary Adjustment by Company.** The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of each of the Notes to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder’s sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys’ fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an “**Event of Default**”:

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company’s (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

Note: Page 8.

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock . If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction . The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or

Note: Page 9.

redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights . If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “ **Purchase Rights** ”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events . In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “ **Corporate Event** ”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have

been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability . If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments . Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver . No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

17. Amending the Terms of this Note . The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

Note: Page 12.

18. Notices; Currency; Payments .

(a) Notices . Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency . All dollar amounts referred to in this Note are in United States Dollars (“ *U.S. Dollars* ”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “ *Exchange Rate* ” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments . Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice . To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “ **Adjustment Right** ” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) “ **Alternate Conversion Price** ” means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the “ **Alternate Conversion Measuring Period** ”). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) “ **Attribution Parties** ” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “ **Bloomberg** ” means Bloomberg, L.P.

(e) “ **Business Day** ” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) “ **Closing Bid Price** ” and “ **Closing Sale Price** ” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of

the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) “ **Common Stock** ” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) “ **Convertible Securities** ” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) “ **Eligible Market** ” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as

defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(m) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(n) “**Principal Market**” means the Nasdaq Capital Market.

(o) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(p) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(q) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the

Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(r) “*VWAP*” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure . Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

Holder: _____

Principal Amount of Note: _____

Date of Note: _____

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 13, 2018 (the “Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and Alto Opportunity Master Fund, SPC—Segregated Master Portfolio B (the “Holder”). This Agreement hereby supersedes and replaces that certain Warrant Exchange Agreement entered into by the Company and Holder effective as of the Effective Date (the “Original Agreement”), and the Original Agreement shall have no further force or effect from and after the execution of this Agreement.

RECITALS

WHEREAS, the Holder currently holds 106,667 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$249,600.00 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants and the Original Agreement, and to return via DWAC withdrawal all Company Common Stock previously issued to Holder in connection with the Original Agreement, in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).

c) If the Closing has not occurred by the third trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Notes (assuming for purposes hereof that (x) the Exchange Notes are convertible at the Alternate Conversion Price (as defined in the Notes) assuming a date of conversion as of the date hereof, (y) interest on the Notes shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Notes set forth in the Exchange Notes). Upon issuance or conversion in accordance with the Exchange Notes the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this Agreement. For purposes of this Agreement, (i) “Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) “Governmental Entity” means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation** . The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering** . Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or brokers’ commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney’s fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation** . Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the “SEC”) pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company’s officers or directors in their capacities as such.

h) **No Group** . The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement** . This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement**. On or before 8:30 a.m., New York City time, on March 5, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement,

release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) **Blue Sky** . The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration** . None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing** . The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period** . For the purposes of Rule 144 and in reliance upon the advice of counsel, the Company acknowledges that (i) the holding period of the Exchange Note (and upon conversion of the Exchange Note, the Conversion Shares) may be tacked onto the holding period of the Warrants, (ii) the Company is not aware of any event reasonably likely to occur that would reasonably be expected to result in the New Securities becoming ineligible to be resold by the Holder pursuant to Rule 144 and (iii) in connection with any resale of any New Securities pursuant to Rule 144, the Holder shall solely be required to provide reasonable assurances that such New Securities are eligible for resale, assignment or transfer under Rule 144, which shall not include an opinion of Holder’s counsel. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the removal of legends, if any, or issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants as well as the Original Agreement marked for cancellation/rescission; In addition, Holder shall return (via DWAC withdrawal) all Company Common Stock previously issued to Holder in connection with the Original Agreement, to be exchanged for the Exchange Note.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note.** The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties.** Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Most Favored Nations.** The Company hereby represents and warrants as of the date hereof and covenants and agrees that no agreement entered into (or to be entered into) with any Person with respect to the Exchange or other transaction involving the warrants issued in the Registered Offering, including, without limitation with respect to any consent, release,

amendment, settlement, or waiver relating to any Exchange or such other transaction involving the warrants issued in the Registered Offering, including without limitation, any amendment, settlement or waiver relating to any securities issued in connection with an exchange of warrants issued in the Registered Offering (including the Exchange Note or other derivative security) (each a "Settlement Document"), is or will be more favorable to such Person (other than any reimbursement of legal fees) than those of the Holder and this Agreement, including without limitation the ratio of warrants to the cash paid, principal amount of notes, value of any shares of Common Stock (valued as the VWAP of the Common Stock on the Trading Day immediately preceding the public announcement of such issuance), or value of any Options, Convertible Securities or Adjustment Rights (as such terms are defined in the Exchange Note) (valued on the Trading Day immediately preceding the public announcement of such issuance, as the greater of (a) the VWAP of the Common Stock multiplied by the number of underlying shares and (b) the Black Scholes Consideration Value) conveyed in such Settlement Document. If, and whenever on or after the date hereof, the Company enters into a Settlement Document, then (i) the Company shall provide notice thereof to the Holder within one (1) Trading Day following the occurrence thereof and (ii) the terms and conditions of this Agreement shall be, without any further action by the Holder or the Company, automatically amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Settlement Document, provided that upon written notice to the Company within ten (10) Trading Days of receipt of notice of such Settlement Document the Holder may notify the Company in writing of Holder's election not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this Agreement shall apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this Section 7(c) shall apply similarly and equally to each Settlement Document. For purposes hereof, "Black Scholes Consideration Value" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or

proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances** . Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries** . This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

**ALTO OPPORTUNITY MASTER FUND, SPC –
SEGREGATED MASTER PORTFOLIO B**

By: Waqas Khatri

Name: Waqas Khatri

Title: Director

Address: c/o Ayrton Capital LLC 222 Broadway, 19th
Floor, New York, NY 10038

E-Mail: wk@ayrtonllc.com

DWAC INSTRUCTIONS Broker Name and DTC Number:

Account Number at DTC Participant (if applicable):

EXHIBIT A

CONVERTIBLE PROMISSORY NOTE

\$ 249,600.00
New York , NY

February 13, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **Alto Opportunity Master Fund, SPC—Segregated Master Portfolio B** or its assigns (“*Holder*”) the principal sum of \$ 249,600.00 (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated February 13 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 13, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 5% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

Note: Page 2.

(a) Conversion Right . Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**") that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate . The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "Conversion Amount" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "Conversion Price" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion .

(i) Optional Conversion . To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the "**Share Delivery Deadline**"), the Company shall (1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not

participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted.

(ii) Company's Failure to Timely Convert . If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder's designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of this Note (as the case may be) (a "**Conversion Failure**"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder's request and in the Holder's discretion, either: (I) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the "**Buy-In Payment Amount**"). Nothing shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) Registration; Book-Entry . The Holder and the Company shall maintain records showing the Principal and Interest converted and/or paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) Limitations on Conversions . The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the “ **Maximum Percentage** ”) of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the “ **Reported Outstanding Share Number** ”). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day

confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the "**Maximum Issuance**"); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion .

(i) General. At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "**Alternate Conversion**", and the date of such Alternate Conversion, each, an "**Alternate Conversion Date**") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price.

(ii) **Mechanics of Alternate Conversion.** On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with “Alternate Conversion Price” replacing “Conversion Price” for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) **Voluntary Adjustment by Company.** The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of each of the Notes to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder’s sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys’ fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an “**Event of Default**”:

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company’s (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

Note: Page 8.

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock . If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction . The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or

Note: Page 9.

redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights . If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “ **Purchase Rights** ”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events . In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “ **Corporate Event** ”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have

been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability . If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments . Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver . No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

17. Amending the Terms of this Note . The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

Note: Page 12.

18. Notices; Currency; Payments .

(a) Notices . Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency . All dollar amounts referred to in this Note are in United States Dollars (“ *U.S. Dollars* ”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “ *Exchange Rate* ” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments . Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice . To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “ **Adjustment Right** ” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) “ **Alternate Conversion Price** ” means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the “ **Alternate Conversion Measuring Period** ”). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) “ **Attribution Parties** ” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “ **Bloomberg** ” means Bloomberg, L.P.

(e) “ **Business Day** ” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) “ **Closing Bid Price** ” and “ **Closing Sale Price** ” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of

the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) “ **Common Stock** ” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) “ **Convertible Securities** ” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) “ **Eligible Market** ” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as

defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(m) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(n) “**Principal Market**” means the Nasdaq Capital Market.

(o) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(p) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(q) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the

Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(r) “*VWAP*” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure . Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou
Name: Angelos Stergiou, M.D., ScD h.c.
Title: Chief Executive Officer

Holder: _____
Principal Amount of Note: _____
Date of Note: _____

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 14, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and LINCOLN PARK CAPITAL FUND LLC. (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 8,333 warrants (the “Warrants”) to purchase shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for shares of Common Stock (the “Exchange Shares”), the number of which is the quotient of \$19,500.00 divided by the closing price of the Exchange Shares on the NASDAQ Capital Market on the trading day preceding the Closing Date of the Exchange Shares in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Shares, and the Company agrees to issue and deliver the Exchange Shares to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”). By February 16, 2018, (i) the Company shall cause the transfer agent for the Common Stock to issue and deliver the Exchange Shares duly registered and freely tradable through the facilities of DTC by DWAC to the custodian and account provided to the Company in writing by the Holder and (ii) the Holder shall deliver and surrender or cause to be delivered and surrendered to the Company for cancellation the Warrants.

c) If the Closing has not occurred by February 16, 2018, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a material adverse effect on the business, properties, financial condition or results or operations of the Company (a “Material Adverse Effect”).

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Issuance and Delivery of the Exchange Shares.** The Exchange Shares have been duly authorized and, will be validly issued, fully paid and nonassessable. Assuming the Warrants were purchased by Holder in the Company’s offering of Common Stock and warrants made pursuant to the Company’s prospectus filed with the Securities and Exchange Commission (the “SEC”) pursuant to Rule 424(b)(5) on February 9, 2017 (the “Registered Offering”) and the Holder is not an “Affiliate” (as such term is defined in Rule 405 promulgated under the Securities Act of 1933, as amended (the “Securities Act”)) of the Company, the Exchange Shares will be issued to the Holder without legend and will be freely tradable by the Holder.

d) **Governmental Consents.** No consent, approval or authorization of or designation, declaration or filing with any governmental authority on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the Exchange Shares or the consummation of any other transaction contemplated by this Agreement.

e) **No Default or Violation .** The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect.

f) **Disclosure of Agreement.** The Company shall, on or before 8:30 a.m., New York City time, on February 20, 2018 issue a Current Report on Form 8-K disclosing all material terms of the transactions contemplated hereby (such Current Report on Form 8-K the “8-K Filing”). From and after the filing of the 8-K Filing, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that is not disclosed in the 8-K Filing. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the filing of the 8-K Filing without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the filing of the 8-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Encumbrances (as defined below). The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Encumbrances. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Encumbrances. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants. "Encumbrances" shall mean any security or other property interest or right, claim, lien, pledge, option, charge, security interest, contingent or conditional sale, or other title claim or retention agreement, interest or other right or claim of third parties, whether perfected or not perfected, voluntarily incurred or arising by operation of law, and including any agreement (other than this Agreement) to grant or submit to any of the foregoing in the future.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Registered Offering.

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate of the Company and has not been an Affiliate during the three months prior to the date hereof.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Shares, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and issuance and acquisition of the Exchange Shares constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Shares. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

(i) **Limitation on Resales** . For thirty (30) trading days following the Closing Date, the Holder shall not sell more than 2.0% of trading volume of Common Stock as reported by Bloomberg, LP for the applicable date of determination through open market sales through the NASDAQ Capital Market on any trading day in which the NASDAQ Capital Market is open for trading.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Shares and deliver the Exchange Shares to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Shares.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Shares shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(d) **Delivery of Exchange Shares**. The Company shall have delivered the Exchange Shares in accordance with the instructions provided pursuant to Section 1.b) hereof.

(e) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 10017
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

d) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

e) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

f) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

g) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Shares.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

LINCOLN PARK CAPITAL LLC.

By: _____

Name: _____

Title: _____

Address:

E-Mail: _____

DWAC INSTRUCTIONS

Broker Name and DTC Number:

Account Number at DTC Participant
(if applicable): _____

HOLDER SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

SELLAS LIFE SCIENCES GROUP, INC.

WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 21, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and EMPERY ASSET MASTER, LTD. (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 346,287 warrants (the “Warrants”) to purchase 11,543 shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$27,010.62 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).

c) If the Closing has not occurred by the second trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Note (assuming for purposes hereof that (x) the Exchange Note is convertible at the Alternate Conversion Price (as defined in the Exchange Note) assuming a date of conversion as of the date hereof, (y) interest on the Exchange Note shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Note set forth in the Exchange Note). Upon issuance or conversion in accordance with the Exchange Note the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this Agreement. For purposes of this Agreement, (i) “Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) “Governmental Entity” means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation** . The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering** . Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or brokers’ commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney’s fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation** . Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the “SEC”) pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company’s officers or directors in their capacities as such.

h) **No Group** . The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement** . This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement**. On or before 8:30 a.m., New York City time, on March 15, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) **Blue Sky** . The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration** . None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing** . The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period** . The Company acknowledges that the Exchange Note will take on the registered characteristics of the Warrants. The Company further acknowledges that Exchange Note, and upon conversion thereof, the Conversion Shares, will not bear any restrictive legends and will be freely tradable. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Note; provided, that the foregoing shall be deemed to have been satisfied by instructions from the Company to its transfer agent to cancel the Warrants upon confirmation of delivery of the Exchange Note.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note**. The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission so long as the sending party does not receive an automatically generated message from the recipient's e-mail server that such e-mail could not be delivered to the receiving party, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 0
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Most Favored Nations .** The Company hereby represents and warrants as of the date hereof and covenants and agrees that no agreement entered into (or to be entered into) with any Person with respect to the Exchange or other transaction involving the warrants issued in the Registered Offering, including, without limitation with respect to any consent, release, amendment, settlement, or waiver relating to any Exchange or such other transaction involving the warrants issued in the Registered Offering, including without limitation, any amendment, settlement or waiver relating to any securities issued in connection with an exchange of warrants issued in the Registered Offering (including the Exchange Note or other derivative security) (each a "Settlement Document"), is or will be more favorable to such Person (other than any reimbursement of legal fees) than those of the Holder and this Agreement, including without limitation the ratio of warrants to the cash paid, principal amount of notes, value of any shares of Common Stock (valued as the VWAP of the Common Stock on the Trading Day immediately preceding the public announcement of such issuance), or value of any Options, Convertible Securities or Adjustment Rights (as such terms are defined in the Exchange Note) (valued on the Trading Day immediately preceding the public announcement of such issuance, as the greater of (a) the VWAP of the Common Stock multiplied by the number of underlying shares and (b) the Black Scholes Consideration Value) conveyed in such Settlement Document. If, and whenever on or after the date hereof, the Company enters into a Settlement Document, then (i) the

Company shall provide notice thereof to the Holder within one (1) Trading Day following the occurrence thereof and (ii) the terms and conditions of this Agreement shall be, without any further action by the Holder or the Company, automatically amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Settlement Document, provided that upon written notice to the Company within ten (10) Trading Days of receipt of notice of such Settlement Document the Holder may notify the Company in writing of Holder's election not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this Agreement shall apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this Section 7(c) shall apply similarly and equally to each Settlement Document. For purposes hereof, "Black Scholes Consideration Value" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances** . Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries** . This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

EMPERY ASSET MASTER, LTD.

By: Empery Asset Management, LP, its authorized agent

By: /s/ Brett Director

Name: Brett Director

Title: General Counsel

Address: c/o Empery Asset Management, LP
1 Rockefeller Plaza, Suite 1205
New York, NY 10020

E-Mail: notices@emperyam.com

EXHIBIT A

SELLAS LIFE SCIENCES GROUP, INC.**WARRANT EXCHANGE AGREEMENT**

This Warrant Exchange Agreement (this “Agreement”) is made as of February 21, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and EMPERY TAX EFFICIENT, LP (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 174,902 warrants (the “Warrants”) to purchase 5,831 shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$13,644.54 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT**SECTION 1. EXCHANGE AND TERMINATION.**

a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.

b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).

c) If the Closing has not occurred by the second trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Note (assuming for purposes hereof that (x) the Exchange Note is convertible at the Alternate Conversion Price (as defined in the Exchange Note) assuming a date of conversion as of the date hereof, (y) interest on the Exchange Note shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Note set forth in the Exchange Note). Upon issuance or conversion in accordance with the Exchange Note the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this Agreement. For purposes of this Agreement, (i) “Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) “Governmental Entity” means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation** . The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering** . Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or brokers’ commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney’s fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation** . Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the “SEC”) pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company’s officers or directors in their capacities as such.

h) **No Group** . The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement** . This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement**. On or before 8:30 a.m., New York City time, on March 15, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) **Blue Sky** . The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration** . None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing** . The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period** . The Company acknowledges that the Exchange Note will take on the registered characteristics of the Warrants. The Company further acknowledges that Exchange Note, and upon conversion thereof, the Conversion Shares, will not bear any restrictive legends and will be freely tradable. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Note; provided, that the foregoing shall be deemed to have been satisfied by instructions from the Company to its transfer agent to cancel the Warrants upon confirmation of delivery of the Exchange Note.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note**. The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission so long as the sending party does not receive an automatically generated message from the recipient's e-mail server that such e-mail could not be delivered to the receiving party, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 0
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Most Favored Nations .** The Company hereby represents and warrants as of the date hereof and covenants and agrees that no agreement entered into (or to be entered into) with any Person with respect to the Exchange or other transaction involving the warrants issued in the Registered Offering, including, without limitation with respect to any consent, release, amendment, settlement, or waiver relating to any Exchange or such other transaction involving the warrants issued in the Registered Offering, including without limitation, any amendment, settlement or waiver relating to any securities issued in connection with an exchange of warrants issued in the Registered Offering (including the Exchange Note or other derivative security) (each a "Settlement Document"), is or will be more favorable to such Person (other than any reimbursement of legal fees) than those of the Holder and this Agreement, including without limitation the ratio of warrants to the cash paid, principal amount of notes, value of any shares of Common Stock (valued as the VWAP of the Common Stock on the Trading Day immediately preceding the public announcement of such issuance), or value of any Options, Convertible Securities or Adjustment Rights (as such terms are defined in the Exchange Note) (valued on the Trading Day immediately preceding the public announcement of such issuance, as the greater of (a) the VWAP of the Common Stock multiplied by the number of underlying shares and (b) the Black Scholes Consideration Value) conveyed in such Settlement Document. If, and whenever on or after the date hereof, the Company enters into a Settlement Document, then (i) the

Company shall provide notice thereof to the Holder within one (1) Trading Day following the occurrence thereof and (ii) the terms and conditions of this Agreement shall be, without any further action by the Holder or the Company, automatically amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Settlement Document, provided that upon written notice to the Company within ten (10) Trading Days of receipt of notice of such Settlement Document the Holder may notify the Company in writing of Holder's election not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this Agreement shall apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this Section 7(c) shall apply similarly and equally to each Settlement Document. For purposes hereof, "Black Scholes Consideration Value" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances** . Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries** . This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

EMPERY TAX EFFICIENT, LP

By: Empery Asset Management, LP, its authorized agent

By: /s/ Brett Director

Name: Brett Director

Title: General Counsel

Address: c/o Empery Asset Management, LP

1 Rockefeller Plaza, Suite 1205

New York, NY 10020

E-Mail: notices@emperyam.com

EXHIBIT A

SELLAS LIFE SCIENCES GROUP, INC.
WARRANT EXCHANGE AGREEMENT

This Warrant Exchange Agreement (this “Agreement”) is made as of February 21, 2018 (“Effective Date”), by and between SELLAS Life Sciences Group, Inc., a Delaware corporation (the “Company”), and EMPERY TAX EFFICIENT II, LP (collectively, the “Holder”).

RECITALS

WHEREAS, the Holder currently holds 278,811 warrants (the “Warrants”) to purchase 9,294 shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”); and

WHEREAS, subject to the terms and conditions set forth herein, the Company and the Holder desire to cancel and retire the Warrants in exchange (the “Exchange”) for a convertible promissory note (the “Exchange Note”), in the amount of \$21,747.96 on such other terms as set forth in the form of Exchange Note attached as Exhibit A, in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”).

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Holder hereby agree as follows:

AGREEMENT

SECTION 1. EXCHANGE AND TERMINATION.

- a) In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Holder agrees to deliver and surrender to the Company for cancellation the Warrants in exchange for the Exchange Note, and the Company agrees to execute and deliver the Exchange Note to the Holder.
- b) The closing under this Agreement (the “Closing”) shall take place upon the satisfaction of each of the conditions set forth in Sections 4 and 5 hereof (the “Closing Date”).
- c) If the Closing has not occurred by the second trading day after the date hereof, this Agreement shall terminate.

SECTION 2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

The Company hereby represents and warrants as of the date hereof to, and covenants with, the Holder as follows:

a) **Organization and Standing.** The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Delaware, has full corporate power and authority to own or lease its properties and conduct its business as presently conducted, and is duly qualified as a foreign corporation and in good standing in each jurisdiction in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below). As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its subsidiaries (the “Subsidiaries”), if any, individually or taken as a whole, or on the transactions contemplated hereby or on the Exchange Documents (as defined below) or by the agreements and instruments to be entered into (or entered into) in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under this Agreement.

b) **Authorization; Corporate Power.** This Agreement has been duly authorized, validly executed and delivered on behalf of the Company and is a valid and binding obligation of the Company enforceable against the Company in accordance with its terms (except as limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) equitable principles generally, including any specific performance), and the Company has the requisite corporate power and authority to execute and deliver this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder.

c) **Valid Issuance and Delivery of New Securities.** The issuance of the Exchange Note is duly authorized and, upon issuance in accordance with the terms of this Agreement, the shares of Common Stock issuable upon conversion or otherwise pursuant to the terms of the Exchange Note (collectively, the “Conversion Shares”, and together with the Exchange Note, the “New Securities”) shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, mortgages, defects, claims, liens, pledges, charges, taxes, rights of first refusal, encumbrances, security interests and other encumbrances (collectively “Liens”) with respect to the issuance thereof. As of the date hereof, the Company has reserved from its duly authorized capital stock not less than 150% of the maximum number of Conversion Shares issuable upon conversion of the Exchange Note (assuming for purposes hereof that (x) the Exchange Note is convertible at the Alternate Conversion Price (as defined in the Exchange Note) assuming a date of conversion as of the date hereof, (y) interest on the Exchange Note shall accrue through the Maturity Date (as defined in the Exchange Note) and will be converted in shares of Common Stock (as defined below) at a conversion price equal to the Alternate Conversion Price assuming a date of conversion as of the date hereof and (z) any such conversion shall not take into account any limitations on the conversion of the Exchange Note set forth in the Exchange Note). Upon issuance or conversion in accordance with the Exchange Note the Conversion Shares when issued, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights or Liens with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The offer and issuance by the Company of the New Securities is exempt from registration under the Securities Act. Each of the New Securities will be freely tradable and shall not be required to bear, and shall not bear, any Securities Act or other restrictive legend.

d) **Consents.** No consent, waiver, approval or authorization of or designation, declaration or filing with any Person (as defined below) on the part of the Company is required in connection with the valid execution and delivery of this Agreement or the offer, sale or issuance of the New Securities or the consummation of any other transaction contemplated by this Agreement. For purposes of this Agreement, (i) “Person” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any Governmental Entity or any department or agency thereof; and (ii) “Governmental Entity” means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing.

e) **No Default or Violation** . The execution and delivery of the Agreement and the consummation of the transactions contemplated by this Agreement by the Company will not (i) result in a breach of or a default under any of the terms or provisions of (A) the Company’s certificate of incorporation or by-laws, or (B) any material provision of any indenture, mortgage, deed of trust or other material agreement or instrument to which the Company is a party or by which it or any of its material properties or assets is bound or (ii) result in a violation of any provision of any law, statute, rule, regulation, or any existing applicable decree, judgment or order by any court, Federal or state regulatory body, administrative agency, or other governmental body having jurisdiction over the Company, or any of its material properties or assets except in the case of clauses (i)(B) or (ii) for any such breaches, defaults or violations which would not have a Material Adverse Effect. The Company has not violated any law or any governmental regulation or requirement which violation has had or would reasonably be expected to have a Material Adverse Effect, and the Company has not received written notice of any such violation.

f) **Offering** . Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the New Securities. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or brokers’ commissions (other than for persons engaged by the Holder or its investment advisor) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Holder harmless against, any liability, loss or expense (including, without limitation, attorney’s fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the Exchange and the issuance of the New Securities. The offer, exchange and issuance, as applicable, of the New Securities as contemplated by this Agreement are exempt from the registration requirements of the Securities Act and the qualification or registration requirements of state securities laws or other applicable blue sky laws. Neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemptions.

g) **Absence of Litigation** . Except as set forth in the reports, schedules, forms, statements and other documents required to be filed by the Company with the Securities and Exchange Commission (the “SEC”) pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock, any securities of the Company or any of the Company’s officers or directors in their capacities as such.

h) **No Group** . The Company acknowledges that, to the Company’s knowledge, the Holder is acting independently in connection with this Agreement and the transactions contemplated hereby, and is not acting as part of a “group” as such term is defined under Section 13(d) of the Securities Act and the rules and regulations promulgated thereunder.

i) **Validity; Enforcement** . This Agreement and each other Exchange Document to which the Company is a party have been duly and validly authorized, executed and delivered on behalf of the Company and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

j) [Intentionally Omitted.]

k) **Disclosure of Agreement**. On or before 8:30 a.m., New York City time, on March 15, 2018 (the “Cleansing Deadline”), the Company shall have publicly, whether through one or more press releases or Current Reports on Form 8-K filed with the SEC, all material terms of the transactions contemplated hereby and any other material, nonpublic information provided to the Holder from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, including by attaching the form of this Agreement as an exhibit to a Current Report on Form 8-K filed with the SEC prior to the Cleansing Deadline. From and after the Cleansing Deadline, the Holder shall not be in possession of any material, nonpublic information received from the Company or any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that has not been publicly disclosed. The Company shall not, and shall cause its officers, directors, employees, affiliates and agents, not to, provide the Holder with any material, nonpublic information regarding the Company from and after the Cleansing Deadline without the express written consent of the Holder. To the extent that the Company delivers any material, non-public information to the Holder after the Cleansing Deadline without the Holder’s express prior written consent, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. The Company shall not disclose the name of the Holder in any filing, announcement, release or otherwise, unless such disclosure is required by law or regulation. In addition, effective upon the Cleansing Deadline, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and the Holder or any of its affiliates, on the other hand, shall terminate and be of no further force or effect. The Company understands and confirms that the Holder will rely on the foregoing representations in effecting transactions in securities of the Company.

l) **Blue Sky** . The Company shall make all filings and reports relating to each Exchange required under applicable securities or “Blue Sky” laws of the states of the United States following the date hereof, if any.

m) **No Integration** . None of the Company, its Subsidiaries, any of their affiliates, or any Person acting on their behalf shall, directly or indirectly, make any offers or sales of any security (as defined in the Securities Act) or solicit any offers to buy any security or take any other actions, under circumstances that would require registration of any of the New Securities under the Securities Act or cause this offering of the New Securities to be integrated with such offering or any prior offerings by the Company for purposes of Regulation D under the Securities Act.

n) **Listing** . The Company shall promptly secure the listing or designation for quotation (as applicable) of all of the Conversion Shares upon the Nasdaq Capital Market (subject to official notice of issuance) and shall maintain such listing of all the Conversion Shares from time to time issuable under the terms of the Exchange Documents. The Company shall maintain the Common Stock’s authorization for quotation on the Nasdaq Capital Market. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock from the Nasdaq Capital Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 2(n).

o) **Holding Period** . The Company acknowledges that the Exchange Note will take on the registered characteristics of the Warrants. The Company further acknowledges that Exchange Note, and upon conversion thereof, the Conversion Shares, will not bear any restrictive legends and will be freely tradable. The Company shall be responsible for any transfer agent fees or Depository Trust Company fees or legal fees of the Company’s counsel with respect to the issuance of New Securities in accordance herewith.

SECTION 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE HOLDER.

(i) The Holder represents and warrants to and covenants with the Company that:

(a) **Valid Existence; Good Standing** . To the extent the Holder is a corporation, limited liability company or other type of entity, the Holder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(b) **Authority; Authorization** . The Holder has full right, power, authority and capacity to enter into this Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement by the Holder, this Agreement shall constitute a valid and binding obligation of the Holder, enforceable in accordance with its terms (except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors’ rights generally, and (ii) as limited by equitable principles generally, including any specific performance).

(c) **Title** . The Holder owns and holds the entire right, title and interest in and to, and is the record and beneficial owner of, the Warrants and the Holder owns the Warrants free and clear of all Liens. The Holder has the full power and authority to vote, transfer and dispose of the Warrants free and clear of any right or Liens. There is no restriction affecting the ability of the Holder to transfer the legal and beneficial title and ownership of the Warrants to the Company and, at the Closing, the Company will acquire legal and valid title to the Warrants, free and clear of all Liens. Other than the transactions contemplated by this Agreement, there is no outstanding vote, plan, pending proposal, or other right of any person to acquire all or any of the Warrants.

(d) **Purchase of Warrants in the Registered Offering**. The Holder purchased the Warrants in the Company's offering of Common Stock and warrants made pursuant to the Company's prospectus filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b)(5) on February 9, 2017 (the "**Registered Offering**").

(e) **Securities Act Exemption** . Neither the Holder nor anyone acting on behalf of the Holder has received any commission or remuneration directly or indirectly in connection with or in order to solicit or facilitate the Exchange. The Holder understands that the Exchange contemplated hereby is intended to be exempt from registration by virtue of Section 3(a)(9) of the Securities Act. The Holder understands that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the Holder set forth herein for purposes of qualifying for the exemption under Section 3(a)(9) of the Securities Act as well as qualifying for exemptions under applicable state securities laws.

(f) **Non-Affiliate** . The Holder is not an Affiliate (as defined below) of the Company and has not been an Affiliate during the three months prior to the date hereof. "Affiliate" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(g) **Information** . The Holder has, in connection with its decision to acquire the Exchange Note, relied with respect to the Company and its affairs solely upon the Company's filings with the SEC and the representations and warranties of the Company contained herein.

(h) **Advisors** . The Holder understands that nothing in this Agreement or any other materials presented to the Holder in connection with the exchange of the Warrants and execution and acquisition of the Exchange Note constitutes legal, tax or investment advice. The Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its acquisition of the Exchange Note. With respect to such matters, the Holder relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Holder understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

SECTION 4. CONDITIONS TO COMPANY'S OBLIGATIONS AT THE CLOSING.

The Company's obligation to complete the issuance of the Exchange Note and deliver the Exchange Note to the Holder at the Closing shall be subject to the following conditions to the extent not waived by the Company:

a) **Execution and Delivery** . The Holder shall have executed and delivered this Agreement.

b) **Covenants** . The Holder shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Holder at or prior to the Closing Date.

c) **Surrender of Warrants**. The Company shall have received in physical form or through book-entry transfer from the Holder all certificates or book-entry notation representing the Warrants to be exchanged for the Exchange Note; provided, that the foregoing shall be deemed to have been satisfied by instructions from the Company to its transfer agent to cancel the Warrants upon confirmation of delivery of the Exchange Note.

d) **Representations and Warranties**. The representations and warranties of the Holder shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 5. CONDITIONS TO THE HOLDER'S OBLIGATIONS AT THE CLOSING.

The Holder's obligation to deliver the Warrants and accept delivery of the Exchange Note shall be subject to the following conditions to the extent not waived by the Holder:

(a) **Execution and Delivery** . The Company shall have executed and delivered this Agreement and the Exchange Note.

(b) **Covenants** . The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

(c) **Delivery of Exchange Note**. The Company shall have delivered the Exchange Note in accordance with the instructions provided pursuant to Section 1.b) hereof.

(d) **Representations and Warranties**. Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Closing Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

SECTION 6. NOTICES.

All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission so long as the sending party does not receive an automatically generated message from the recipient's e-mail server that such e-mail could not be delivered to the receiving party, or when so received in the case of mail or courier, and addressed as follows:

(a) if to the Company, to:

SELLAS Life Sciences Group, Inc.
315 Madison, 4th Flr.
New York, New York 0
Attention: Angelos Stergiou, M.D., ScD h.c.
E-Mail: astergiou@sellaslife.com

or to such other person at such other place as the Company shall designate to the Holder in writing; and

(b) if to the Holder, at the address as set forth at the end of this Agreement, or at such other address as may have been furnished by the Holder to the Company in writing.

SECTION 7. MISCELLANEOUS.

a) **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

b) **Severability.** In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

c) **Most Favored Nations .** The Company hereby represents and warrants as of the date hereof and covenants and agrees that no agreement entered into (or to be entered into) with any Person with respect to the Exchange or other transaction involving the warrants issued in the Registered Offering, including, without limitation with respect to any consent, release, amendment, settlement, or waiver relating to any Exchange or such other transaction involving the warrants issued in the Registered Offering, including without limitation, any amendment, settlement or waiver relating to any securities issued in connection with an exchange of warrants issued in the Registered Offering (including the Exchange Note or other derivative security) (each a "Settlement Document"), is or will be more favorable to such Person (other than any reimbursement of legal fees) than those of the Holder and this Agreement, including without limitation the ratio of warrants to the cash paid, principal amount of notes, value of any shares of Common Stock (valued as the VWAP of the Common Stock on the Trading Day immediately preceding the public announcement of such issuance), or value of any Options, Convertible Securities or Adjustment Rights (as such terms are defined in the Exchange Note) (valued on the Trading Day immediately preceding the public announcement of such issuance, as the greater of (a) the VWAP of the Common Stock multiplied by the number of underlying shares and (b) the Black Scholes Consideration Value) conveyed in such Settlement Document. If, and whenever on or after the date hereof, the Company enters into a Settlement Document, then (i) the

Company shall provide notice thereof to the Holder within one (1) Trading Day following the occurrence thereof and (ii) the terms and conditions of this Agreement shall be, without any further action by the Holder or the Company, automatically amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Settlement Document, provided that upon written notice to the Company within ten (10) Trading Days of receipt of notice of such Settlement Document the Holder may notify the Company in writing of Holder's election not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this Agreement shall apply to the Holder as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holder. The provisions of this Section 7(c) shall apply similarly and equally to each Settlement Document. For purposes hereof, "Black Scholes Consideration Value" means the value of the applicable Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option, Convertible Security or Adjustment Right (as the case may be) as of the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be), (iii) a zero cost of borrow and (iv) an expected volatility equal to the greater of 100% and the 30 day volatility obtained from the "HVT" function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option, Convertible Security or Adjustment Right (as the case may be).

d) **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York without regard to the choice of law principles thereof. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of New York located in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or thereby, and hereby irrevocably waives any objection that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains an electronic file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic file signature page (as the case may be) were an original thereof.

f) **Successors and Assigns.** Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

g) **Entire Agreement; Amendments.** This Agreement and other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. This Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms and conditions hereof may be waived, only by a written instrument signed by all parties, or, in the case of a waiver, by the party waiving compliance. Except as expressly stated herein, no delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any right, power or privilege hereunder preclude any other or future exercise of any other right, power or privilege hereunder.

h) **Survival.** The representations, warranties, covenants and agreements made in this Agreement shall survive the closing of the transactions contemplated hereby and the exchange and delivery of the Warrants and the Exchange Note.

i) **Further Assurances** . Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j) **No Third Party Beneficiaries** . This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

COMPANY SIGNATURE PAGE TO
WARRANT EXCHANGE AGREEMENT

HOLDER:

EMPERY TAX EFFICIENT II, LP

By: Empery Asset Management, LP, its authorized agent

By: /s/ Brett Director

Name: Brett Director

Title: General Counsel

Address: c/o Empery Asset Management, LP
1 Rockefeller Plaza, Suite 1205
New York, NY 10020

E-Mail: notices@emperyam.com

EXHIBIT A

CONVERTIBLE PROMISSORY NOTE

\$27,010.62
New York , NY

February 21, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **EMPERY ASSET MASTER, LTD.** or its assigns (“*Holder*”) the principal sum of **\$27,010.62** (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated February 21, 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 9, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 4.75% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

Note: Page 1

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

(a) Conversion Right . Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**")) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate . The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "Conversion Amount" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "Conversion Price" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion .

(i) Optional Conversion . To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the "**Share Delivery Deadline**"), the Company shall

(1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted. While this Note remains outstanding, the Company shall use a transfer agent that participates in the DTC Fast Automated Securities Transfer Program.

(ii) Company's Failure to Timely Convert . If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder's designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of this Note (as the case may be) (a "**Conversion Failure**"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder's request and in the Holder's discretion, either: (I) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the "**Buy-In Payment Amount**"). Nothing shall limit

the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) Registration; Book-Entry . The Holder and the Company shall maintain records showing the Principal and Interest converted and/or paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) Limitations on Conversions . The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share

Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the "**Maximum Issuance**"); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion .

(i) General. At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "**Alternate Conversion**", and the date of such Alternate Conversion, each, an "**Alternate Conversion Date**") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price.

(ii) Mechanics of Alternate Conversion. On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with "Alternate Conversion Price" replacing "Conversion Price" for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) Voluntary Adjustment by Company . The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of this Note to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder's sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys' fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an "**Event of Default**":

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company's (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock . If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction . The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume

all of the obligations of the Company under this Note and the other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights . If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “ **Purchase Rights** ”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events . In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “**Corporate Event**”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability . If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of

the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments . Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver . No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

17. Amending the Terms of this Note . The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

18. Notices; Currency; Payments .

(a) Notices . Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency . All dollar amounts referred to in this Note are in United States Dollars (“ *U.S. Dollars* ”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “ *Exchange Rate* ” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments . Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice . To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “ **Adjustment Right** ” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) “ **Alternate Conversion Price** ” means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the “ **Alternate Conversion Measuring Period** ”). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) “ **Attribution Parties** ” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “ **Bloomberg** ” means Bloomberg, L.P.

(e) “ **Business Day** ” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) “ **Closing Bid Price** ” and “ **Closing Sale Price** ” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market

where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) “ **Common Stock** ” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) “ **Convertible Securities** ” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) “ **Eligible Market** ” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any

Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Notes**” means this Note and one or more additional convertible notes issued pursuant to one or more agreements relating to the issuance of notes in exchange for warrants issued pursuant to the Registered Offering (as defined in the Exchange Agreement).

(m) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(n) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(o) “**Principal Market**” means the Nasdaq Capital Market.

(p) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(q) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(r) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(s) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure . Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its

Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou
Name: Angelos Stergiou, M.D., ScD h.c.
Title: Chief Executive Officer

Holder: _____
Principal Amount of Note: _____
Date of Note: _____

CONVERTIBLE PROMISSORY NOTE

\$13,644.54
New York, NY

February 21, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **EMPERY TAX EFFICIENT, LP** or its assigns (“*Holder*”) the principal sum of **\$13,644.54** (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated February 21, 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 9, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 4.75% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

Note: Page 1

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

(a) Conversion Right . Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**")) that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate . The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "Conversion Amount" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "Conversion Price" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion .

(i) Optional Conversion . To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the "**Share Delivery Deadline**"), the Company shall

(1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted. While this Note remains outstanding, the Company shall use a transfer agent that participates in the DTC Fast Automated Securities Transfer Program.

(ii) Company's Failure to Timely Convert . If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder's designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of this Note (as the case may be) (a "**Conversion Failure**"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder's request and in the Holder's discretion, either: (I) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the "**Buy-In Payment Amount**"). Nothing shall limit

the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) Registration; Book-Entry . The Holder and the Company shall maintain records showing the Principal and Interest converted and/or paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) Limitations on Conversions . The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share

Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the "**Maximum Issuance**"); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion .

(i) **General.** At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "**Alternate Conversion**", and the date of such Alternate Conversion, each, an "**Alternate Conversion Date**") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price.

(ii) **Mechanics of Alternate Conversion.** On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with "Alternate Conversion Price" replacing "Conversion Price" for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) **Voluntary Adjustment by Company.** The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of this Note to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder's sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys' fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an "**Event of Default**":

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company's (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

Note: Page 7

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock . If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction . The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume

all of the obligations of the Company under this Note and the other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights . If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “ **Purchase Rights** ”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events . In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “*Corporate Event*”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability . If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of

the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments . Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver . No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

17. Amending the Terms of this Note . The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

18. Notices; Currency; Payments .

(a) Notices . Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency . All dollar amounts referred to in this Note are in United States Dollars (“ *U.S. Dollars* ”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “ *Exchange Rate* ” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments . Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice . To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “ **Adjustment Right** ” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) “ **Alternate Conversion Price** ” means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the “ **Alternate Conversion Measuring Period** ”). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) “ **Attribution Parties** ” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “ **Bloomberg** ” means Bloomberg, L.P.

(e) “ **Business Day** ” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) “ **Closing Bid Price** ” and “ **Closing Sale Price** ” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market

where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) “ **Common Stock** ” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) “ **Convertible Securities** ” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) “ **Eligible Market** ” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any

Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Notes**” means this Note and one or more additional convertible notes issued pursuant to one or more agreements relating to the issuance of notes in exchange for warrants issued pursuant to the Registered Offering (as defined in the Exchange Agreement).

(m) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(n) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(o) “**Principal Market**” means the Nasdaq Capital Market.

(p) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(q) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(r) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(s) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure . Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its

Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17

SELLAS LIFE SCIENCES GROUP, INC.

By: _____

Name: Angelos Stergiou, M.D., ScD h.c.

Title: Chief Executive Officer

Holder: _____

Principal Amount of Note: _____

Date of Note: _____

CONVERTIBLE PROMISSORY NOTE

\$21,747.96
New York, NY

February 21, 2018

For value received **SELLAS Life Sciences Group, Inc.**, a Delaware corporation (the “*Company*”), promises to pay to **EMPERY TAX EFFICIENT II, LP** or its assigns (“*Holder*”) the principal sum of **\$21,747.96** (the “*Principal*”) together with accrued and unpaid interest thereon (the “*Interest*”), each due and payable on the date and in the manner set forth below.

This convertible promissory note (the “*Note*”) was issued in reliance on the exemption provided in Rule 3(a)(9) of the Securities Act of 1933, as amended, pursuant to the terms of that certain Exchange Agreement, dated February 21, 2018 (the “*Exchange Agreement*”), by and between the Company and the Holder in exchange for that certain Warrant (as defined in the Exchange Agreement) originally issued on February 13, 2017 and shall be subject to the following terms (capitalized terms not defined herein shall have the meaning as set forth in the Exchange Agreement):

1. Repayment. All payments of Interest and Principal shall be in lawful money of the United States of America. All payments shall be applied first to accrued Interest, and thereafter to Principal. The outstanding Principal amount of the Note shall be due and payable on August 9, 2018 (the “*Maturity Date*”).

2. Interest. The Company promises to pay simple Interest on the outstanding Principal amount hereof from the date hereof until payment in full, which Interest shall be payable at the rate of 4.75% per annum (the “*Interest Rate*”) or the maximum rate permissible by law, whichever is less. Interest shall be due and payable by way of inclusion of the Interest in the Conversion Amount on any Conversion Date in accordance with Section 3 below or in cash on the Maturity Date and shall be calculated on the basis of a 365-day year for the actual number of days elapsed. From and after the occurrence and during the continuance of any Event of Default (as defined below), the Interest Rate shall automatically be increased to eighteen percent (18.0%) per annum (the “*Default Rate*”). In the event that such Event of Default is subsequently cured (and no other Event of Default then exists (including, without limitation, for the Company’s failure to pay such Interest at the Default Rate on the Maturity Date)), the adjustment referred to in the preceding sentence shall cease to be effective as of the calendar day immediately following the date of such cure; provided that the Interest as calculated and unpaid at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of such cure of such Event of Default.

Note: Page 1

3. Conversion.

At the election of the Holder made at any time after April 30, 2018, this Note shall be convertible into validly issued, fully paid and non-assessable shares of Common Stock (as defined below), on the terms and conditions set forth in this Section 3.

(a) Conversion Right . Subject to the provisions of Section 3(d), at any time or times on or after April 30, 2018, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) into validly issued, fully paid and non-assessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp, issuance and similar taxes, costs and expenses (including, without limitation, fees and expenses of the Company's transfer agent (the "**Transfer Agent**") that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate . The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the "**Conversion Rate**").

(i) "Conversion Amount" means the sum of (x) portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made and (y) all accrued and unpaid Interest with respect to such portion of the Principal amount.

(ii) "Conversion Price" means, as of any Conversion Date or other date of determination, \$7.00, subject to adjustment as provided herein.

(c) Mechanics of Conversion .

(i) Optional Conversion . To convert any Conversion Amount into shares of Common Stock on any date (a "**Conversion Date**"), the Holder shall deliver (whether via facsimile, electronic mail or otherwise), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion (the "**Conversion Notice**") to the Company. If required by Section 3(c)(iii), within two (2) Trading Days following a conversion of this Note as aforesaid, the Holder shall surrender this Note to a nationally recognized overnight delivery service for delivery to the Company (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Trading Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation and representation as to whether such shares of Common Stock may then be resold pursuant to Rule 144 or an effective and available registration statement, of receipt of such Conversion Notice to the Holder and the Transfer Agent which confirmation shall constitute an instruction to the Transfer Agent to process such Conversion Notice in accordance with the terms herein. On or before the second (2nd) Trading Day following the date on which the Company has received a Conversion Notice (or such earlier date as required pursuant to the Exchange Act or other applicable law, rule or regulation for the settlement of a trade initiated on the applicable Conversion Date of such shares of Common Stock issuable pursuant to such Conversion Notice) (the "**Share Delivery Deadline**"), the Company shall

Note: Page 2

(1) provided that the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion to the Holder's or its designee's balance account with DTC through its Deposit/Withdrawal at Custodian system or (2) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, upon the request of the Holder, issue and deliver (via reputable overnight courier) to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled pursuant to such conversion. If this Note is physically surrendered for conversion pursuant to Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than two (2) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder (or its designee) a new Note representing the outstanding Principal not converted. While this Note remains outstanding, the Company shall use a transfer agent that participates in the DTC Fast Automated Securities Transfer Program.

(ii) Company's Failure to Timely Convert. If the Company shall fail, for any reason or for no reason, on or prior to the applicable Share Delivery Deadline, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, to issue and deliver to the Holder (or its designee) a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the balance account of the Holder or the Holder's designee with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of this Note (as the case may be) (a "**Conversion Failure**"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock corresponding to all or any portion of the number of shares of Common Stock issuable upon such conversion that the Holder is entitled to receive from the Company and has not received from the Company in connection with such Conversion Failure (a "**Buy-In**"), then, in addition to all other remedies available to the Holder, the Company shall, within two (2) Business Days after receipt of the Holder's request and in the Holder's discretion, either: (I) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other Person in respect, or on behalf, of the Holder) (the "**Buy-In Price**"), at which point the Company's obligation to so issue and deliver such certificate (and to issue such shares of Common Stock) or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (II) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the balance account of such Holder or such Holder's designee, as applicable, with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (x) such number of shares of Common Stock multiplied by (y) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date of the applicable Conversion Notice and ending on the date of such issuance and payment under this clause (II) (the "**Buy-In Payment Amount**"). Nothing shall limit

the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the conversion of this Note as required pursuant to the terms hereof.

(iii) Registration; Book-Entry . The Holder and the Company shall maintain records showing the Principal and Interest converted and/or paid (as the case may be) and the dates of such conversions, and/or payments (as the case may be) or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion. Notwithstanding anything to the contrary set forth in this Section 3, following conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted (in which event this Note shall be delivered to the Company following conversion thereof as contemplated by Section 3(c)(i)) or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note.

(d) Limitations on Conversions . The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note pursuant to the terms and conditions of this Note and any such conversion shall be null and void and treated as if never made, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including, without limitation, the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of this Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company or the Transfer Agent, if any, setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Conversion Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share

Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be purchased pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. No prior inability to convert this Note pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of convertibility. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note. Further, notwithstanding anything in this Note to the contrary, under no circumstances shall the Company be obligated to issue or the Holder entitled to receive, an aggregate number of shares of Common Stock that would exceed 19.9% of the total number of shares of Common Stock issued and outstanding as of the date of this Note (the "**Maximum Issuance**"); provided, that to the extent the aggregate number of shares of Common Stock would exceed the Maximum Issuance, the Company shall issue and deliver to Holder a number of shares of Common Stock up to the Maximum Issuance and the unconverted Principal of this Note shall remain outstanding.

(e) Right of Alternate Conversion .

(i) **General.** At any time at any time after the occurrence of an Event of Default (regardless of whether such Event of Default has been cured), the Holder may, at the Holder's option, convert (each, an "**Alternate Conversion**", and the date of such Alternate Conversion, each, an "**Alternate Conversion Date**") all, or any part of, the Conversion Amount (such portion of the Conversion Amount subject to such Alternate Conversion, the "**Alternate Conversion Amount**") into shares of Common Stock at the Alternate Conversion Price.

(ii) **Mechanics of Alternate Conversion.** On any Alternate Conversion Date, the Holder may voluntarily convert any Alternate Conversion Amount pursuant to Section 3(c) (with "Alternate Conversion Price" replacing "Conversion Price" for all purposes hereunder with respect to such Alternate Conversion) by designating in the Conversion Notice delivered pursuant to this Section 3(e) of this Note that the Holder is electing to use the Alternate Conversion Price for such conversion. Notwithstanding anything to the contrary in this Section 3(e), but subject to Section 3(d), until the Company delivers shares of Common Stock representing the applicable Alternate Conversion Amount to the Holder, such Alternate Conversion Amount may be converted by the Holder into shares of Common Stock pursuant to Section 3(c) without regard to this Section 3(e).

(f) **Voluntary Adjustment by Company.** The Company may at any time during the term of this Note, with the prior written consent of the Holder, reduce the then current Conversion Price of this Note to any amount and for any period of time deemed appropriate by the board of directors of the Company.

4. Maturity. Unless this Note has been previously converted or prepaid in accordance with the terms of Section 3(a) above, the entire outstanding Conversion Amount shall become fully due and payable in cash on the Maturity Date; provided, that if the Conversion Amount is not paid in full in cash on the Maturity Date, subject to Section 3(d) above, the Holder shall retain the right to convert all, or any part, at such Holder's sole discretion, of the Conversion Amount into shares of Common Stock in accordance with Section 3 above.

5. Expenses. In the event of any default hereunder, the Company shall pay all reasonable attorneys' fees and court costs incurred by Holder in enforcing and collecting this Note.

6. Prepayment. The Company may prepay this Note and accrued but unpaid Interest prior to the Maturity Date at any time without the consent of the Holder; provided, that the Company may not prepay any Conversion Amount submitted for conversion pursuant to Section 3 above from and after the applicable Conversion Date unless such corresponding Conversion Notice is withdrawn by the Holder.

7. Default. If there shall be any Event of Default hereunder, at the option and upon the declaration of the Holder and upon written notice to the Company (which election and notice shall not be required in the case of an Event of Default under Section 7(v), 7(vi) or 7(vii)), this Note shall accelerate and all Principal and unpaid accrued Interest shall become immediately due and payable. The occurrence of any one or more of the following shall constitute an "**Event of Default**":

(i) the suspension (or threatened suspension) from trading or the failure (or threatened failure) of the Common Stock to be trading or listed (as applicable) on the Nasdaq Capital Market for a period of five (5) consecutive Trading Days;

(ii) the Company's (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Trading Days after the applicable Conversion Date or exercise date (as the case may be) or (B) notice, written or oral, to any holder of the Notes, including, without limitation, by way of public announcement or through any of its agents, at any time, of its intention not to comply, as required, with a request for conversion of any Notes into shares of Common Stock that is requested in accordance with the provisions of the Notes, other than pursuant to Section 3(d);

(iii) the Company's or any Subsidiary's failure to pay to the Holder any amount of Principal, Interest or other amounts when and as due under this Note (including, without limitation, the Company's failure to pay any redemption payments or amounts hereunder) or any other Exchange Document or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby, except, in the case of a failure to pay Interest when and as due, in which case only if such failure remains uncured for a period of at least two (2) Trading Days;

(iv) [INTENTIONALLY OMITTED];

(v) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any Subsidiary and, if instituted against the Company or any Subsidiary by a third party, shall not be dismissed within thirty (30) days of their initiation;

(vi) the commencement by the Company or any Subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree, order, judgment or other similar document in respect of the Company or any Subsidiary in an involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal, state or foreign law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the execution of a composition of debts, or the occurrence of any other similar federal, state or foreign proceeding, or the admission by it in writing of its inability to pay its debts generally as they become due, the taking of corporate action by the Company or any Subsidiary in furtherance of any such action or the taking of any action by any Person to commence a Uniform Commercial Code foreclosure sale or any other similar action under federal, state or foreign law;

Note: Page 7

(vii) the entry by a court of (i) a decree, order, judgment or other similar document in respect of the Company or any Subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law or (ii) a decree, order, judgment or other similar document adjudging the Company or any Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking liquidation, reorganization, arrangement, adjustment or composition of or in respect of the Company or any Subsidiary under any applicable federal, state or foreign law or (iii) a decree, order, judgment or other similar document appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or any Subsidiary or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree, order, judgment or other similar document or any such other decree, order, judgment or other similar document unstayed and in effect for a period of thirty (30) consecutive days; or

(viii) other than as specifically set forth in another clause of this Section 7, the Company or any Subsidiary breaches any representation, warranty, covenant or other term or condition of any Exchange Document, except, in the case of a breach of a covenant or other term or condition that is curable, only if such breach remains uncured for a period of three (3) consecutive Trading Days.

8. Adjustment of Conversion Price upon Subdivision or Combination of Common Stock . If the Company at any time on or after the date hereof subdivides (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the date hereof combines (by any stock split, stock dividend, stock combination, recapitalization or other similar transaction) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased. Any adjustment pursuant to this Section 8 shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this Section 8 occurs during the period that a Conversion Price is calculated hereunder, then the calculation of such Conversion Price shall be adjusted appropriately to reflect such event.

9. Rights upon Fundamental Transaction . The Company shall not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Exchange Documents in accordance with the provisions of this Section 9 pursuant to written agreements in form and substance satisfactory to the Holder and approved by the Holder prior to such Fundamental Transaction, including agreements to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts then outstanding and the interest rates of the Notes held by such holder, having similar conversion rights as the Notes and having similar ranking and security to the Notes, and satisfactory to the Holder and (ii) the Successor Entity (including its Parent Entity) is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market. Upon the occurrence of any Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Exchange Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume

all of the obligations of the Company under this Note and the other Exchange Documents with the same effect as if such Successor Entity had been named as the Company herein. Upon consummation of a Fundamental Transaction, the Successor Entity shall deliver to the Holder confirmation that there shall be issued upon conversion or redemption of this Note at any time after the consummation of such Fundamental Transaction, in lieu of the shares of Common Stock (or other securities, cash, assets or other property (except such items still issuable under Sections 10(a) and 11, which shall continue to be receivable thereafter) issuable upon the conversion or redemption of the Notes prior to such Fundamental Transaction, such shares of the publicly traded common stock (or their equivalent) of the Successor Entity (including its Parent Entity) which the Holder would have been entitled to receive upon the happening of such Fundamental Transaction had this Note been converted immediately prior to such Fundamental Transaction (without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. Notwithstanding the foregoing, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 9 to permit the Fundamental Transaction without the assumption of this Note. The provisions of this Section 9 shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the conversion of this Note.

10. Rights Upon Issuance of Purchase Rights and Other Corporate Events.

(a) Purchase Rights . If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to all or substantially all of the record holders of any class of Common Stock (the “ **Purchase Rights** ”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note and assuming for such purpose that the Note was converted at the Alternate Conversion Price as of the applicable record date) immediately prior to the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to the extent of the Maximum Percentage (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to the extent of any such excess) and such Purchase Right to such extent shall be held in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable) for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance (and, if such Purchase Right has an expiration date, maturity date or other similar provision, such term shall be extended by such number of days held in abeyance, if applicable)) to the same extent as if there had been no such limitation).

(b) Other Corporate Events . In addition to and not in substitution for any other rights hereunder, prior to the consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities or other assets with respect to or in exchange for shares of Common Stock (a “*Corporate Event*”), the Company shall make appropriate provision to ensure that the Holder will thereafter have the right to receive upon a conversion of this Note, at the Holder’s option (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event (without taking into account any limitations or restrictions on the convertibility of this Note) or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of shares of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the Holder. The provisions of this Section 10(b) shall apply similarly and equally to successive Corporate Events and shall be applied without regard to any limitations on the conversion or redemption of this Note.

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

12. Severability . If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of

the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

13. Maximum Payments . Nothing contained herein shall be deemed to establish or require the payment of a rate of interest or other charges in excess of the maximum permitted by applicable law. In the event that the rate of interest required to be paid or other charges hereunder exceed the maximum permitted by such law, any payments in excess of such maximum shall be credited against amounts owed by the Company to the Holder and thus refunded to the Company.

14. Waiver. The Company hereby waives demand, notice, presentment, protest and notice of dishonor.

15. Governing Law. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.

16. Failure Or Indulgence Not Waiver . No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party. Notwithstanding the foregoing, nothing contained in this Section 16 shall permit any waiver of any provision of Section 3(d).

17. Amending the Terms of this Note . The prior written consent of the Holder shall be required for any change, waiver or amendment to this Note.

18. Notices; Currency; Payments .

(a) Notices . Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with the terms of the Exchange Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, and (B) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Currency . All dollar amounts referred to in this Note are in United States Dollars (“*U.S. Dollars*”), and all amounts owing under this Note shall be paid in U.S. Dollars. All amounts denominated in other currencies (if any) shall be converted into the U.S. Dollar equivalent amount in accordance with the Exchange Rate on the date of calculation. “*Exchange Rate*” means, in relation to any amount of currency to be converted into U.S. Dollars pursuant to this Note, the U.S. Dollar exchange rate as published in the Wall Street Journal on the relevant date of calculation (it being understood and agreed that where an amount is calculated with reference to, or over, a period of time, the date of calculation shall be the final date of such period of time).

(c) Payments . Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, unless otherwise expressly set forth herein, such payment shall be made in lawful money of the United States of America by a certified check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing, provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder’s wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day.

19. Waiver of Notice . To the extent permitted by law, the Company hereby irrevocably waives demand, notice, presentment, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Exchange Agreement.

20. Assignment. This Note may be transferred only upon its surrender to the Company for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, this Note shall be reissued to, and registered in the name of, the transferee, or a new Note for like Principal amount and Interest shall be issued to, and registered in the name of, the transferee. Interest and Principal shall be paid solely to the registered holder of this Note. Such payment shall constitute full discharge of the Company’s obligation to pay such Interest and Principal.

21. CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “ **Adjustment Right** ” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale) of shares of Common Stock that could result in a decrease in the net consideration received by the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

(b) “ **Alternate Conversion Price** ” means, with respect to any Alternate Conversion that price which shall be the lowest of (i) the applicable Conversion Price as in effect on the applicable Conversion Date of the applicable Alternate Conversion, (ii) 70% of the lowest VWAP of the Common Stock as of the Trading Day during the ten (10) consecutive Trading Day period ending and including the applicable Alternate Conversion Date (such period, the “ **Alternate Conversion Measuring Period** ”). All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction that proportionately decreases or increases the Common Stock during such Alternate Conversion Measuring Period.

(c) “ **Attribution Parties** ” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “ **Bloomberg** ” means Bloomberg, L.P.

(e) “ **Business Day** ” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) “ **Closing Bid Price** ” and “ **Closing Sale Price** ” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price (as the case may be) then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market

where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock splits, stock dividends, stock combinations, recapitalizations or other similar transactions during such period.

(g) “ **Common Stock** ” means (i) the Company’s shares of common stock, \$0.0001 par value per share, and (ii) any capital stock into which such common stock shall have been changed or any share capital resulting from a reclassification of such common stock.

(h) “ **Convertible Securities** ” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(i) “ **Eligible Market** ” means The New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market or the Principal Market.

(j) “ **Fundamental Transaction** ” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any

Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(k) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(l) “**Notes**” means this Note and one or more additional convertible notes issued pursuant to one or more agreements relating to the issuance of notes in exchange for warrants issued pursuant to the Registered Offering (as defined in the Exchange Agreement).

(m) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities issued to Persons other than the Company.

(n) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(o) “**Principal Market**” means the Nasdaq Capital Market.

(p) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(q) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(r) “**Trading Day**” means, as applicable, (x) with respect to all price or trading volume determinations relating to the Common Stock, any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(s) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market (or, if the Principal Market is not the principal trading market for such security, then on the principal securities exchange or securities market on which such security is then traded) during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “HP” function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 22. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period.

22. Disclosure . Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries, the Company shall within the later of (a) the Cleansing Deadline and (b) one (1) Business Day after any such receipt or delivery, publicly disclose such material, non-public information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, non-public information relating to the Company or any of its

Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, non-public information relating to the Company or any of its Subsidiaries. If the Company or any of its Subsidiaries provides material non-public information to the Holder after the Cleansing Deadline that is not simultaneously filed in a Current Report on Form 8-K and the Holder has not agreed to receive such material non-public information, the Company hereby covenants and agrees that the Holder shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to any of the foregoing not to trade on the basis of, such material non-public information. Nothing contained in this Section 22 shall limit any obligations of the Company, or any rights of the Holder, under the Exchange Agreement.

[signature page follows]

Note: Page 17

SELLAS LIFE SCIENCES GROUP, INC.

By: /s/ Angelos Stergiou
Name: Angelos Stergiou, M.D., ScD h.c.
Title: Chief Executive Officer

Holder: _____
Principal Amount of Note: _____
Date of Note: _____

SELLAS Life Sciences Group, Inc.

The following is a list of subsidiaries of the Company as of December 31, 2017, omitting some subsidiaries which, considered in the aggregate, would not constitute a significant subsidiary.

SUBSIDIARY**(Name under which subsidiary does business)**

SELLAS Life Sciences Group LTD

Mills Pharmaceuticals, LLC

Aptera, Inc.

**STATE OF OTHER JURISDICTION OF
INCORPORATION OR ORGANIZATION**

Bermuda

Delaware

Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-213908), and Form S-8 (333-174819, 333-182578, 333-210833, and 333-213248) of SELLAS Life Sciences Group, Inc. (the “Company”) of our report dated April 13, 2018, relating to the consolidated financial statements of the Company (which report expresses an unqualified opinion and includes an explanatory paragraph regarding the Company’s going concern uncertainty), appearing in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

/s/ Moss Adams LLP

San Francisco, California

April 13, 2018

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
SELLAS Life Sciences Group, Inc.

We consent to the incorporation by reference in the registration statements on Form S-1 (No. 333-213908) and on Form S-8 (333-174819, 333-182578, 333-210833, and 333-213248) of SELLAS Life Sciences Group, Inc. of our report dated September 22, 2017, with respect to the consolidated balance sheet of SELLAS Life Sciences Group, Ltd. as of December 31, 2016, and the related consolidated statements of operations, changes in shareholders' deficit, and cash flows for the year then ended, and the related notes, before the effects of the retrospective changes resulting from the merger described in Note 1, and the addition of net loss per share information to the consolidated financial statements as described in Note 3 (collectively, the "consolidated financial statements"), not included herein, which report appears in the December 31, 2017 annual report on Form 10-K of SELLAS Life Sciences Group, Inc.

Our report dated September 22, 2017 contains an explanatory paragraph that states that the Company has suffered recurring net losses since its inception, which raises substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

/s/ KMPG Audit Limited

Chartered Professional Accountants
Hamilton, Bermuda
April 12, 2018

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Angelos M. Stergiou, MD, certify that:

1. I have reviewed this Annual Report on Form 10-K of SELLAS Life Sciences Group, Inc.;
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;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: April 13, 2018

/s/ Angelos M. Stergiou

Angelos M. Stergiou, MD, ScD h.c.
President and Chief Executive Officer

**CERTIFICATION OF INTERIM CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Aleksey Krylov, certify that:

1. I have reviewed this Annual Report on Form 10-K of SELLAS Life Sciences Group, Inc.;
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;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: April 13, 2018

/s/ Aleksey Krylov

Aleksey Krylov, CFA
Interim Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the accompanying Annual Report of SELLAS Life Sciences Group, Inc., (the “Company”) on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned officers of the Company certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the Company’s financial condition and result of operations.

/s/ Angelos M. Stergiou

Angelos M. Stergiou, MD, ScD h.c.
President and Chief Executive Officer

Dated: April 13, 2018

/s/ Aleksey Krylov

Aleksey Krylov, CFA
Interim Chief Financial Officer

Dated: April 13, 2018

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350 has been provided to the Registrant and will be retained by the Registrant and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.