

As confidentially submitted to the Securities and Exchange Commission on February 9, 2017, pursuant to Section 6(e) of the Securities Act of 1933, as amended, as Amendment No. 2 to the confidential submission. This Amendment No. 2 to the draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

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

**FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**G1 THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**26-3648180**  
(I.R.S. Employer  
Identification Number)

**79 T.W. Alexander Drive  
4501 Research Commons, Suite 100  
Research Triangle Park, NC 27709  
(919) 213-9835**

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

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President and Chief Executive Officer  
G1 Therapeutics, Inc.  
79 T.W. Alexander Drive  
4501 Research Commons, Suite 100  
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Approximate date of commencement of proposed sale to the public:  
**As soon as practicable after the effective date of this registration statement.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

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

Large accelerated filer   
Non-accelerated filer  (Do not check if a smaller reporting company)

Accelerated filer   
Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

	Proposed maximum aggregate offering price(1)	Amount of registration fee(2)
Title of each class of securities to be registered		

Common stock, \$0.0001 par value per share	\$	\$
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- (1) Includes initial public offering price of shares that the underwriters have the option to purchase to cover overallocments, if any. Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate initial public offering price.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated February 9, 2017

Prospectus

*shares*



## Common stock

This is an initial public offering of common stock by G1 Therapeutics, Inc. We are selling \_\_\_\_\_ shares of our common stock. The estimated initial public offering price is between \$ \_\_\_\_\_ and \$ \_\_\_\_\_ per share.

Prior to this offering, there has been no public market for our common stock. We have applied to list our common stock on The NASDAQ Global Market under the symbol "GTHX."

We are an "emerging growth company" under applicable Securities and Exchange Commission rules and will be subject to reduced public company reporting requirements.

	Per share	Total
Initial public offering price	\$ _____	\$ _____
Underwriting discounts and commissions(1)	\$ _____	\$ _____
Proceeds to G1 Therapeutics, Inc., before expenses	\$ _____	\$ _____

(1) The underwriters will receive compensation in addition to the underwriting discount. See "Underwriting" beginning on page 154.

We have granted the underwriters an option for a period of 30 days to purchase up to \_\_\_\_\_ additional shares of common stock.

Investing in our common stock involves a high degree of risk. See "[Risk factors](#)" beginning on page 11.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to investors on or about \_\_\_\_\_, 2017.

**J.P. Morgan**

**Needham & Company**

, 2017

**Cowen and Company**

**Wedbush PacGrow**

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**We have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.**

For investors outside of the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

## Prospectus summary

*This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our financial statements and the related notes thereto and the information set forth under the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. Unless the context otherwise requires, we use the terms "G1," "G1 Therapeutics," "Company," "we," "us" and "our" in this prospectus to refer to G1 Therapeutics, Inc.*

### Overview

We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel therapeutics for the treatment of cancer. Our two clinical assets are based on our core understanding of cyclin-dependent kinases, or CDKs, a family of proteins that play an important role in the growth and proliferation of all human cells. Two particular CDKs, CDK4 and CDK6, collectively known as CDK4/6, represent a validated and promising class of targets for anti-cancer therapeutics. We have leveraged our deep expertise in CDK4/6 biology to discover and develop two highly potent and selective CDK4/6 inhibitors that may have broad applicability across multiple cancer indications. We believe we are the only company with two distinct clinical-stage CDK4/6 inhibitors, trilaciclib and G1T38, each of which has the potential to be the backbone therapy of multiple combination regimens.

CDK4/6 is required for growth and proliferation in certain normal cell types, such as hematopoietic stem and progenitor cells, or HSPCs. HSPCs reside in the bone marrow and are the "reservoir" from which all blood and immune system cells are formed. Additionally, CDK4/6 plays an integral role in the growth and proliferation of certain types of tumors. Tumors that rely on CDK4/6 to grow and proliferate are referred to as CDK4/6-dependent tumors, and include the most common kinds of prostate and breast cancer. Alternatively, some tumors can grow and proliferate without CDK4/6 activity and are referred to as CDK4/6-independent. CDK4/6 independent tumors include small cell lung cancer, or SCLC, and triple-negative breast cancer, or TNBC. Our two CDK4/6 inhibitors were rationally designed to treat distinct patient populations with different combination regimens. Trilaciclib is in development in combination with chemotherapy for the treatment of patients with CDK4/6-independent tumors. G1T38 is in development in combination with targeted therapies for the treatment of patients with CDK4/6-dependent tumors.

### Product candidates

Trilaciclib, our most advanced candidate, is a potential first-in-class intravenous CDK4/6 inhibitor we rationally designed to preserve HSPCs and enhance immune system function during chemotherapy. Chemotherapy has significant clinical utility and continues to be the most effective treatment for many cancers. However, it also damages HSPCs (myelosuppression) and the immune system (immunosuppression), leading to severe adverse effects and limiting anti-tumor activity. We believe that if the beneficial effects of chemotherapy (i.e. potent tumor cell killing) could be maximized, while minimizing the deleterious side-effects of myelosuppression and immunosuppression, patient outcomes would be significantly improved.

In the open-label Phase 1b parts of two Phase 1b/2a trials of trilaciclib and chemotherapy in SCLC, response rates and tolerability have compared favorably to historical chemotherapy-only trials. For example, in 17 evaluable patients in the Phase 1b part of the trial in first-line SCLC patients, we have seen an 88% response rate (including one complete response, or CR) and a clinical benefit rate of 94%. In historical chemotherapy-

only trials, the response rates are approximately 50% and the CR rates are less than 1%. In the Phase 1b parts of these two trials, we have treated 51 patients with over 250 cycles of trilaciclib and chemotherapy, and have not had a single episode of febrile neutropenia – one of the most common adverse consequences of these chemotherapy regimens. Based on these compelling results, we initiated the randomized, placebo-controlled Phase 2a parts of these SCLC trials, as well as a randomized Phase 2 trial in patients with TNBC. Initial data from these trials are expected to be released in 2018.

To our knowledge, we are the only company developing a CDK4/6 inhibitor specifically for use with chemotherapy. We believe that trilaciclib has the potential to transform the chemotherapy treatment paradigm and significantly benefit patient outcomes. Additionally, based upon robust preclinical data, we believe that trilaciclib has the potential to significantly enhance the efficacy of checkpoint inhibitor/chemotherapy combinations. In December 2016, we entered into a non-exclusive collaboration with Genentech to evaluate trilaciclib in combination with Genentech’s checkpoint inhibitor Tecentriq to realize this potential.

G1T38, our second clinical-stage candidate, is a potential best-in-class oral CDK4/6 inhibitor being developed to be used in combination with other targeted therapies to treat multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor Ibrance and others in development. Our preclinical data and early clinical data indicate the potential for continuous daily dosing and improved antitumor activity and tolerability. A Phase 1 trial of G1T38 in 75 healthy volunteers showed a favorable safety profile leading to the initiation of a Phase 1/2 trial in ER+, HER2- breast cancer (in combination with Faslodex) in January 2017. Our plans for G1T38 include combinations in other cancers, such as non-small cell lung cancer, or NSCLC, where we expect to begin a Phase 2 trial in 2018 in combination with an EGFR inhibitor. We believe that G1T38 has the potential to be the backbone therapy of multiple proprietary combination regimens.

As shown in the table below, we designed two distinct CDK4/6 inhibitors, trilaciclib and G1T38, with unique properties for different uses:

**Two distinct CDK4/6 inhibitors, rationally designed and optimized by G1 Therapeutics**

<b>Drug</b>	<b>CDK4/6 tumor type</b>	<b>MOA</b>	<b>Dosing</b>	<b>Combination</b>	<b>Initial indications</b>
Trilaciclib	Independent	Preserves HSPCs, enhances immune system function	IV, intermittent	Chemotherapy and/or checkpoint inhibitor	SCLC, TNBC
G1T38	Dependent	Stops tumor cell proliferation	Oral, daily	Targeted therapies (e.g. SERD, EGFRi)	ER+, HER2-breast cancer, NSCLC

As part of our strategy to develop wholly owned proprietary combinations that complement our CDK4/6 portfolio, we have exclusively in-licensed G1T48, a potential first/best-in-class oral selective estrogen receptor degrader, or SERD. We expect to initially develop G1T48 to be used in combination with G1T38 for the treatment of ER+, HER2- breast cancer. Based on compelling preclinical efficacy and safety data, we expect to file an investigational new drug application, or IND, or clinical trial authorization application, or CTA, for G1T48 in the fourth quarter of 2017. With an oral SERD (G1T48) and an oral CDK4/6 inhibitor (G1T38), we believe we are in a unique position as the only emerging biopharmaceutical company with a wholly owned or exclusively licensed, proprietary combination for this validated regimen in ER+, HER2- breast cancer. We plan to continue to leverage our proprietary assets and knowledge of CDK4/6 biology to explore additional combination treatments and to build a fully integrated oncology company.

## Background on cancer treatments

Cancer is the second leading cause of death in the United States with approximately 1.7 million new cases and 600,000 deaths in 2016. We estimate that more than one million patients in the United States receive chemotherapy annually and that approximately 300,000 of these patients have CDK4/6-independent tumors where treatment with trilaciclib may provide significant benefit. Other cancers, such as many types of breast, prostate, colon, lung and brain cancers, as well as various hematologic malignancies, are CDK4/6-dependent. We estimate that at least 300,000 patients are diagnosed with late-stage CDK4/6-dependent tumors per year in the United States and could potentially benefit from G1T38. There are also approximately 160,000 women in the United States with late-stage ER+, HER2- breast cancer who could potentially benefit from G1T38 and G1T48.

Broadly speaking, the treatment of cancer can be divided into three major therapeutic categories: chemotherapy, immunotherapy/checkpoint inhibitors, and targeted agents. Nearly all patients diagnosed with cancer get treated with one or more or a combination of these treatment modalities during the course of their disease. We believe that oncology has entered a new treatment paradigm involving combination therapies to attack multiple underlying mechanisms of cancer cell growth and survival.

These therapeutics, while efficacious, have considerable challenges and limitations, as outlined below:

- **Chemotherapy:** Chemotherapy-induced myelosuppression causes abnormally low numbers of red blood cells, neutrophils, and/or platelets, putting patients at an increased risk for infection and bleeding, requiring hospitalizations, antibiotics, transfusions, and growth factor administrations. Moreover, dose reductions and delays are often needed to manage these side effects, limiting efficacy.
- **Cancer immunotherapy:** Despite impressive durability, less than 30% of patients respond to checkpoint inhibitors. One approach to increase response rate is the use of chemotherapy at the time of checkpoint inhibitor administration. While chemo-induced tumor cell death is immunogenic, chemotherapy also causes immunosuppression that can dampen the generation of a sustained anti-tumor response.
- **Targeted therapies:** Targeted therapies block critical receptors or enzymes that transduce signals for tumor cells to proliferate. Because cancer cells can become resistant to single-agent targeted therapies, combination regimens are being utilized more frequently. Each component of these combination regimens must be well tolerated to limit potential additive toxicities.

## G1 Therapeutics' approach in addressing the challenges




Trilaciclib has been developed to maximize the beneficial effects of chemotherapy (i.e. potent tumor cell killing), while minimizing the deleterious side-effects of myelosuppression and immunosuppression, with the potential for significant improvements in patient outcomes. Trilaciclib aims to achieve these outcomes by preserving HSPCs and enhancing immune system function during chemotherapy. To our knowledge, we are the only company developing a CDK4/6 inhibitor in this way, and we believe that trilaciclib has the potential to transform the chemotherapy treatment paradigm and significantly benefit patient outcomes. We also believe that trilaciclib has the potential to become an essential component of checkpoint inhibitor/chemotherapy combination regimens.

G1T38 is a potential best-in-class oral CDK4/6 inhibitor with broad applicability to multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor lbrance and others in development. In 2015, lbrance became the first FDA-approved CDK4/6 inhibitor for use as a combination therapy for the treatment of ER+, HER2- breast cancer. Despite a favorable efficacy/tolerability profile, patients on lbrance must be monitored for abnormally low numbers of neutrophils, or neutropenia, and

can only be given the drug on a 21 day-on/7 day-off schedule. Even with this dosing holiday, dose-delays and dose reductions due to persistent neutropenia are common. Despite these shortcomings, since its launch in the United States, Ibrance has been prescribed by more than 9,000 physicians to approximately 45,000 patients. Worldwide sales of Ibrance in 2016 were approximately \$2.1 billion and analysts estimate peak annual worldwide sales exceeding \$7 billion. Other CDK4/6 inhibitors in development have reported cardiovascular and liver side effects or gastrointestinal tolerability issues. We believe that G1T38 has the potential for continuous daily dosing and may be able to be given in combination with several targeted therapies that are on the market or in development. Moreover, our oral SERD, G1T48, gives us the opportunity to develop a wholly owned proprietary combination therapy, G1T38 + G1T48, for patients with ER+, HER2- breast cancer.

### Pipeline overview

We believe that our CDK4/6 inhibitor candidates have the potential to treat nearly all forms of cancer and be administered in combination with most conventional and emerging cancer therapies. Both trilaciclib and G1T38 were designed and synthesized by us, and we hold an exclusive license to G1T48. We own or exclusively license and control the worldwide commercial rights to each of our product candidates, and own or hold exclusive rights to over 115 U.S. and international patents and pending patent applications covering our product development programs.

Program	Initial indications	Phase	Expected milestones	Additional potential indications	Worldwide commercial rights
<b>trilaciclib</b> (IV CDK4/6 inhibitor)	1st-line SCLC	1b/2a	Phase 1b complete. Report initial Phase 2a data in 2018	NSCLC, bladder, head and neck cancer	
	2nd/3rd-line SCLC	1b/2a	Phase 1b complete. Report initial Phase 2a data in 2018		
	metastatic TNBC	2	Report initial data in 2018		
	1st-line SCLC plus Tecentriq	—	Initiate Phase 2 in 2Q17		
<b>G1T38</b> (oral CDK4/6 inhibitor)	ER+, HER2-breast cancer (plus Faslodex)	1/2	Report initial Phase 1 data in 2Q17	CRPC, Heme malignancies	
	NSCLC (plus EGFRi)	—	Initiate Phase 2 in 2018		
<b>G1T48</b> (oral SERD)	ER+, HER2-breast cancer	Preclinical	File IND/CTA in 4Q17		

### Our strategy

Our goal is to be a leader in the discovery and development of CDK4/6 inhibitor-based treatments for cancer. Our strategy includes the following key components:

- Develop trilaciclib in combination with chemotherapy across multiple indications
- Develop trilaciclib in combination with immune checkpoint inhibitors
- Develop G1T38 as a best-in-class treatment across multiple CDK4/6-dependent cancers
- Rapidly advance G1T48 into clinical trials in combination with G1T38
- Pursue global development of combination therapies
- Build a fully integrated oncology company



## **Risks associated with our business**

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include the following:

- We have incurred significant operating losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.
- Even if this offering is successful, we will need substantial additional funding. If we are unable to raise capital when needed, we would be compelled to delay, reduce or eliminate our product development programs or commercialization efforts.
- Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.
- Initial success in our ongoing clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials.
- We are very early in our development efforts. If we are unable to successfully develop and commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.
- Our development of a CDK4/6 inhibitor to treat CDK4/6-independent tumors is novel, unproven and rapidly evolving and may never lead to a marketable product.
- Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.
- If we are not able to obtain, or if there are delays in obtaining, required marketing approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, development of our product candidates may be delayed or prevented, which could have a material adverse effect on our business.
- Our product candidates may cause undesirable side effects that could delay or prevent their marketing approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.
- We rely on, and expect to continue to rely on, third parties to conduct our clinical trials for our product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our product candidates, and our business could be substantially harmed.
- If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.
- If we infringe or are asserted to infringe patents of third parties in the United States or foreign countries in the course of making, using or selling our products, we may be subject to expensive litigation which is time

consuming for company employees, and which we may lose. We could be required to settle or pay damages to a third party company for patent infringement if a court determines that we infringe a patent right of a third party, or we could be precluded from making, using, selling or offering to sell our products.

### **Implications of being an emerging growth company**

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.0 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such fiscal year or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related management's discussion and analysis of financial condition and results of operations in our initial registration statement;
- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley;
- we may provide reduced disclosure about our executive compensation arrangements; and
- we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We have chosen to opt out of the extended transition periods available to emerging growth companies under the JOBS Act for complying with new or revised accounting standards. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition periods for complying with new or revised accounting standards is irrevocable.

### **Our corporate information**

We were incorporated under the laws of the State of Delaware in May 2008 under the name "G-Zero Therapeutics, Inc." In September 2012, we changed our name to "G1 Therapeutics, Inc." Our principal executive offices are located at 79 T.W. Alexander Drive, 4501 Research Commons, Suite 100, Research Triangle Park, NC 27709, and our telephone number is (919) 213-9835. Our website address is [www.g1therapeutics.com](http://www.g1therapeutics.com). The information contained on, or that can be accessed through, our website is not and shall not be deemed to be part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. Investors should not rely on any such information in deciding whether to purchase our common stock.

"G1 Therapeutics" and our logo are our trademarks. All other service marks, trademarks and trade names appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

## The offering

**Common stock offered by us** shares

**Common stock to be outstanding after this offering** shares

**Option to purchase additional shares** The underwriters have an option within 30 days of the date of this prospectus to purchase up to additional shares of our common stock to cover overallocments, if any.

**Use of proceeds** We estimate the net proceeds from this offering will be approximately \$ million (or \$ million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from the offering to fund development of trilaciclib, G1T38 and G1T48, and for working capital and other general corporate purposes. See the "Use of Proceeds" section for additional information.

**Risk factors** You should read the "Risk Factors" section of this prospectus beginning on page 11 and other information included in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.

**Proposed NASDAQ Global Market symbol** "GTHX"

The number of shares of our common stock to be outstanding after this offering is based on 61,234,107 shares of our common stock outstanding as of January 31, 2017, and excludes the following:

- 11,215,314 shares of common stock issuable upon the exercise of outstanding stock options as of January 31, 2017, having a weighted-average exercise price of \$0.73 per share;
- 126,334 shares of common stock issuable upon the exercise of outstanding warrants as of January 31, 2017, having a weighted-average exercise price of \$0.25 per share; and
- 385,600 shares of common stock reserved for issuance pursuant to future awards under our 2011 Equity Incentive Plan; and
- shares of common stock reserved for issuance pursuant to future awards under our 2017 Employee, Director and Consultant Equity Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective upon the closing of this offering.

Except as otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 56,799,234 shares of common stock upon the completion of this offering;

- the conversion of a warrant to purchase 65,934 shares of our Series 1 Preferred Stock into a warrant to purchase 65,934 shares of our common stock;
- no exercise by the underwriters of their option purchase up to an additional                      shares of our common stock in this offering;
- the adoption of our amended and restated certificate of incorporation and amended and restated by-laws prior to the closing of this offering; and
- a one-for-                      reverse stock split of our common stock to be effected prior to the closing of this offering.

## Summary financial data

You should read the following summary financial data together with our financial statements and the related notes appearing at the end of this prospectus and the "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. We have derived the statement of operations data for the years ended December 31, 2015 and 2016 and the balance sheet data as of December 31, 2016 from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of results that should be expected in the future.

	Year ended December 31,	
	2015	2016
<b>Statements of Operations Data:</b>		
Grant revenue	\$ 522,431	\$ —
Operating expenses:		
Research and development	12,730,335	25,161,300
General and administrative	3,215,803	5,229,640
Total operating expenses	15,946,138	30,390,940
Operating loss	(15,423,707)	(30,390,940)
Other income (expenses):		
Other income	17,781	182,372
Change in fair value of warrant liability	(84,998)	(82,231)
Change in fair value of Series B purchase option liability	(4,772,509)	—
Total other income (expense), net	(4,839,726)	100,141
Net loss and comprehensive loss	(20,263,433)	(30,290,799)
Accretion of redeemable convertible preferred stock(1)	(1,426,740)	(4,405,007)
Net loss attributable to common shareholders	\$(21,690,173)	\$(34,695,806)
Basic and diluted net loss per share(2)	\$ (5.38)	\$ (7.78)
Weighted average shares outstanding, basic and diluted(2)	4,033,772	4,460,986
Pro forma basic and diluted net loss per share (unaudited)(2)(3)		\$ (0.54)
Pro forma weighted-average basic and diluted shares outstanding (unaudited)(2)(3)		55,647,597

	As of December 31, 2016		
	Actual	Pro forma(3)	Pro forma as adjusted(4)(5)
<b>Balance Sheet Data:</b>			
Cash, cash equivalents and short term investments	\$ 47,304,820	\$47,304,820	
Working capital(6)	42,275,736	42,442,965	
Total assets	48,211,921	48,211,921	
Redeemable convertible preferred stock	107,580,149	—	
Total stockholders' (deficit) equity	(64,993,540)	42,753,838	

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- (1) See Note 7 to our financial statements appearing elsewhere in this prospectus for further details on the calculation of accretion of redeemable convertible preferred stock.
- (2) See Note 9 to our financial statements appearing elsewhere in this prospectus for further details on the calculation of basic and diluted net loss per share and pro forma basic and diluted net loss per share applicable to common stockholders.
- (3) Pro forma balance sheet data give effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 56,799,234 shares of our common stock upon the completion of this offering and the conversion of a warrant to purchase 65,934 shares of our Series 1 Preferred Stock into a warrant to purchase 65,934 shares of our common stock upon the completion of this offering.
- (4) Pro forma as adjusted to reflect the pro forma adjustments described in (3) above, and to further reflect the sale of shares of our common stock offered in this offering, assuming an initial public offering price of \$            per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (5) The pro forma as adjusted information presented above is illustrative only and will change based on the actual initial public offering price and the other terms of this offering determined at pricing. A \$1.00 increase (decrease) in the assumed initial public offering price of \$            per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by approximately \$            million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. A 1,000,000 share increase (decrease) in the number of shares offered by us would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, and total stockholders' (deficit) equity by approximately \$            million, assuming an initial public offering price of \$            per share, the midpoint of the estimated price range set forth on the cover page of this prospectus.
- (6) We define working capital as current assets less current liabilities.

## Risk factors

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including our financial statements and related notes, before investing in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, operating results and prospects could be materially harmed. In that event, the price of our common stock could decline, and you could lose part or all of your investment.*

### Risks related to our financial position and need for additional capital

***We have incurred significant operating losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.***

We have incurred significant operating losses since our inception. We incurred net losses of \$20.3 million and \$30.3 million for the years ended December 31, 2015 and 2016, respectively, and as of December 31, 2016, we had an accumulated deficit of \$65.0 million. Our most advanced clinical-stage product candidate, trilaciclib, is currently in three clinical trials, two Phase 1b/2a trials and a Phase 2 trial. Our other clinical-stage product candidate, G1T38, is currently in a Phase 1/2 clinical trial. It may be several years, if ever, before we have a product candidate ready for commercialization. To date, we have financed our operations primarily through private placements of our preferred stock. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter. We anticipate that our expenses will increase substantially if and as we:

- continue development of our product candidates, including initiating additional clinical trials of trilaciclib and G1T38 and completing preclinical studies and potentially initiating clinical trials of our preclinical-stage product candidate, G1T48;
- identify and develop new product candidates;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- achieve market acceptance of our product candidates in the medical community and with third-party payors;
- maintain, expand and protect our intellectual property portfolio;
- hire additional personnel;
- enter into collaboration arrangements, if any, for the development of our product candidates or in-license other products and technologies;
- achieve milestones requiring payment under our in-licensing programs;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur increased costs as a result of operating as a public company.

Because of the numerous risks and uncertainties associated with developing pharmaceutical drugs, we are unable to predict the extent of any future losses or when we will become profitable, if at all. In addition, our

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expenses could increase beyond expectations if we are required by the Food and Drug Administration, or FDA, or foreign regulatory agencies, to perform studies and clinical trials in addition to those that we currently anticipate, or if there are any delays in our or our partners completing clinical trials or the development of any of our product candidates.

To become and remain profitable, we must develop and eventually commercialize a product or products with significant market potential. This will require us to be successful in a range of challenging activities, including the following:

- completing clinical trials of our product candidates that meet their clinical endpoints;
- obtaining marketing approval for our product candidates;
- manufacturing, marketing and selling those products for which we may obtain marketing approval; and
- achieving market acceptance of our product candidates in the medical community and with third-party payors.

We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our discovery and preclinical development efforts, expand our business or continue our operations and may require us to raise additional capital that may dilute your ownership interest. A decline in the value of our company could also cause you to lose all or part of your investment.

### ***Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.***

We are an early-stage biopharmaceutical company. Biopharmaceutical drug development is a highly speculative undertaking and involves a substantial degree of risk. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies, and conducting clinical trials of trilaciclib and G1T38. We have not yet demonstrated our ability to successfully complete large-scale, pivotal clinical trials, obtain marketing approvals, 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 product commercialization. Typically, it takes several years to develop one new drug from the time it is discovered to when it is available for treating patients. In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

### ***Even if this offering is successful, we will need substantial additional funding. If we are unable to raise capital when needed, we would be compelled to delay, reduce or eliminate our product development programs or commercialization efforts.***

The development of pharmaceutical drugs is capital-intensive. We expect our expenses to increase in parallel with our ongoing activities, particularly as we conduct larger-scale clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. We may also need to raise additional funds sooner if we choose to pursue additional indications and/or geographies for our product candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, upon the closing of this offering, we expect to incur additional costs



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associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our clinical programs, development efforts or any future commercialization efforts.

As of December 31, 2016, we had \$47.3 million in cash and cash equivalents. We believe that, based upon our current operating plan, our existing capital resources, together with the net proceeds from this offering, will be sufficient to fund our anticipated operations for at least 24 months. Our future capital requirements and the period for which we expect our existing resources to support our operations may vary significantly from what we expect. Our monthly spending levels vary based on new and ongoing research and development and other corporate activities. Because the length of time and activities associated with successful research and development of our product candidates is highly uncertain, we are unable to estimate the actual funds we will require for development and any approved marketing and commercialization activities. In addition, our future capital requirements will depend on many factors, and could increase significantly as a result of many factors, including:

- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for our product candidates;
- the scope, prioritization and number of our research and development programs;
- the costs, timing and outcome of regulatory review of our product candidates;
- the extent to which we enter into non-exclusive, jointly funded clinical research collaboration arrangements, if any, for the development of our product candidates in combination with other companies' products;
- our ability to establish collaboration arrangements for the development of our product candidates on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under our license agreement and any collaboration agreements into which we may enter, if any;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under future collaboration agreements, if any;
- the extent to which we acquire or in-license product candidates and technologies, such as G1T48, and the terms of such in-licenses;
- the costs of future commercialization activities, including product sales, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval; and
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims.

Conducting preclinical studies and clinical trials is a time-consuming, expensive and uncertain process that can take years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that may not be commercially available for several years, if ever. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives.

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Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Volatility in the financial markets have generally made equity and debt financing more difficult to obtain, and may have a material adverse effect on our ability to meet our fundraising needs. We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline.

If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research or development programs or the commercialization of any product candidate or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations.

***Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.***

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of private and public equity financings, debt financings, collaborations, strategic alliances and licensing arrangements. The sale of additional equity or convertible debt securities would dilute all of our stockholders, including purchasers of common stock in this offering. The incurrence of indebtedness would result in increased fixed payment obligations, and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights, limitations on declaring dividends and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through collaborations, strategic alliances or licensing arrangements with third parties, and we could be required to do so at an earlier stage than otherwise would be desirable. In connection with any such collaborations, strategic alliances or licensing arrangements, we may be required to relinquish valuable rights to our intellectual property, future revenue streams, research programs or product candidates, grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves, or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

***Our net losses and significant cash used in operating activities have raised substantial doubt regarding our ability to continue as a going concern.***

We have a limited operating history and have experienced net losses and significant cash used in operating activities in each period since inception. We expect to continue to incur net losses and have significant cash outflows for at least the next few years prior to commercialization of our product candidates, and we have an accumulated deficit of \$65.0 million as of December 31, 2016. These conditions raise substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2016 with respect to this uncertainty. Our ability to continue as a going concern could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or generate revenues from collaborative partnerships. Future reports on our financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern. We have not been profitable since inception, and it is possible we will never achieve profitability. None of our product candidates can be marketed until regulatory approvals have been obtained. Accordingly, there is no substantial source of revenues to sustain our present activities, and no substantial revenues will likely be available until, and unless, our product candidates are approved by the FDA or comparable regulatory agencies in other countries and successfully marketed, either by us or a partner, an outcome which may not occur. We will require significant

additional cash resources to launch new development phases of existing projects in our pipeline. If we cannot continue as a viable entity, our stockholders may lose some or all of their investment in us.

## Risks related to development of our product candidates

### ***Initial success in our ongoing clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials.***

We are currently evaluating trilaciclib in three clinical trials: two Phase 1b/2a trials in patients with small cell lung cancer, or SCLC, and one Phase 2 trial in patients with triple-negative breast cancer, or TNBC. While trilaciclib has shown compelling response rates and favorable tolerability in early-stage trials, including the completed Phase 1b parts of the two Phase 1b/2a trials in SCLC, these trials are not complete, and we may not see such favorable data in these ongoing or in future clinical trials involving trilaciclib. Similarly, favorable results obtained from early-stage trials of G1T38 may not be replicated in the ongoing Phase 1/2 trial in ER+, HER2- breast cancer or in any future clinical trials. Furthermore, there can be no assurance that any of our clinical trials will ultimately be successful or support further clinical development of any of our product candidates. There is a high failure rate for drugs and biologics proceeding through clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies, and any such setbacks in our clinical development could have a material adverse effect on our business and operating results.

### ***Preliminary and interim data from our clinical studies, including the Phase 1b parts of our Phase 1b/2a trials of trilaciclib, may change as more patient data become available.***

Preliminary or interim data from our clinical studies, including those from the Phase 1b parts of our Phase 1b/2a trials of trilaciclib, are not necessarily predictive of final results. Preliminary and interim data are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues, more patient data become available and we issue our final clinical study report. As a result, preliminary and interim data should be viewed with caution until the final data are available. Material adverse changes in the final data compared to the interim data could significantly harm our business prospects.

### ***We are very early in our development efforts. If we are unable to successfully develop and commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.***

We currently do not have any products that have gained marketing approval. We have invested substantially all of our efforts and financial resources identifying and developing our CDK4/6 inhibitor product candidates, trilaciclib and G1T38, and our oral SERD product candidate, G1T48. Our ability to generate product revenues, which may not occur for several years, if ever, will depend on the successful development and eventual commercialization of trilaciclib, for which two Phase 1b/2a clinical trials and one Phase 2 trial are ongoing, G1T38, for which one Phase 1/2 trial is ongoing, and G1T48, which is currently in preclinical development. We currently generate no revenues from sales of any drugs, and we may never be able to develop or commercialize a marketable drug. Each of our product candidates will require development, management of development and manufacturing activities, marketing approval in multiple jurisdictions, obtaining manufacturing supply, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenues from drug sales.

We have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical area. For example, to execute our business plan, we will need to successfully:

- execute development activities for our product candidates, including successful enrollment in and completion of clinical trials;

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- obtain required marketing approvals for the development and commercialization of our product candidates;
- obtain and maintain patent and trade secret protection and regulatory exclusivity for our product candidates and ensure that we do not infringe the valid patent rights of third parties;
- protect, leverage and expand our intellectual property portfolio;
- establish and maintain clinical and commercial manufacturing capabilities or make arrangements with third-party manufacturers for clinical and commercial manufacturing;
- build and maintain robust sales, distribution and marketing capabilities, either on our own or in collaboration with strategic partners, if our product candidates are approved;
- gain acceptance for our product candidates, if approved, by patients, the medical community and third-party payors;
- compete effectively with other therapies;
- obtain and maintain healthcare coverage and adequate reimbursement;
- maintain a continued acceptable safety profile for our product candidates following approval, if approved;
- develop and maintain any strategic relationships we elect to enter into, if any;
- enforce and defend intellectual property rights and claims; and
- manage our spending as costs and expenses increase due to preclinical development, clinical trials, marketing approvals and commercialization.

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 commercialize our product candidates, which would materially harm our business. If we do not receive marketing approvals for our product candidates, we may not be able to continue our operations.

### ***Our development of a CDK4/6 inhibitor to treat CDK4/6-independent tumors is novel, unproven and rapidly evolving and may never lead to a marketable product.***

Our clinical-stage product candidate, trilaciclib, is a potent and selective CDK4/6 inhibitor we are developing to initially target patients with CDK4/6-independent tumors. The use of a CDK4/6 inhibitor in combination with chemotherapy to treat patients with CDK4/6-independent tumors is a novel approach to the treatment of cancer, and we believe that we are the only company currently developing a CDK4/6 inhibitor for this patient population. The scientific evidence to support the feasibility of developing this product candidate is both preliminary and limited. Even though trilaciclib has demonstrated positive results in preclinical studies and early-stage clinical trials, we may not succeed in demonstrating safety and efficacy of trilaciclib in larger-scale clinical trials.

Advancing this novel therapy creates significant challenges for us, including:

- obtaining marketing approval, as the FDA and other regulatory authorities have limited experience with commercial development of CDK4/6 inhibitor therapies for cancer;
- educating medical personnel regarding the potential safety benefits, as well as the challenges, of incorporating our product candidates, if approved, into their treatment regimens; and
- establishing sales and marketing capabilities upon obtaining any marketing approval to gain market acceptance of a novel therapy.

***If we experience delays or difficulties in the enrollment of patients in clinical trials, development of our product candidates may be delayed or prevented, which would have a material adverse effect on our business.***

Identifying and qualifying patients to participate in clinical trials for our product candidates is critical to our success. In particular, because we are initially focused on patients with diseases with genetically defined tumors, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials. Patient enrollment may be affected by many factors including:

- the severity of the disease under investigation;
- the eligibility criteria for the clinical trial in question;
- the perceived risks and benefits of the product candidate under study;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the availability of competing therapies and clinical trials; and
- the proximity and availability of clinical trial sites for prospective patients.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our clinical trials may be delayed or terminated. Any delays in completing our clinical trials will increase our costs, delay or prevent our product candidate development and approval process, and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may harm our business, financial condition and prospects significantly.

***Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and may experience delays in obtaining, or ultimately be unable to obtain, the approval of our product candidates.***

The risk of failure in drug development is high. Trilaciclib is currently being studied in two Phase 1b/2a clinical trials and one Phase 2 clinical trial, G1T38 is currently being studied in one Phase 1/2 clinical trial and G1T48 is in preclinical development. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical trials are expensive, difficult to design and implement and can take several years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Further, the results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive marketing approval.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates. Clinical trials may be delayed, suspended or prematurely terminated because costs are greater than we anticipate or for a variety of reasons, such as:

- delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that we are able to execute;

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- 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 clinical trial;
- delays in reaching, or failure to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- inability, delay, or failure in identifying and maintaining a sufficient number of trial sites, many of which may already be engaged in other clinical programs;
- delay or failure in recruiting and enrolling suitable subjects to participate in a trial;
- delay or failure in having subjects complete a trial or return for post-treatment follow-up;
- clinical sites and investigators deviating from the clinical protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial;
- failure to initiate or delay of or failure to complete a clinical trial as a result of an Investigational New Drug Application, or IND, being placed on clinical hold by the FDA, or for other reasons;
- lack of adequate funding to continue a clinical trial, including unforeseen costs due to enrollment delays, requirements to conduct additional clinical trials and increased expenses associated with the services of our CROs and other third parties;
- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- regulators, or a Data Safety Monitoring Board, or DSMB, if one is used for our clinical trials, may require that we suspend or terminate our clinical trials for various reasons, including noncompliance with regulatory requirements, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, or a finding that the participants are being exposed to unacceptable health risks;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient;
- the FDA or other regulatory authorities may require us to submit additional data or impose other requirements before permitting us to initiate a clinical trial; or
- there may be changes in governmental regulations or administrative actions.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of marketing approval for our product candidates. Further, the FDA may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after it has reviewed and commented on the design for our clinical trials.

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If we are required to conduct additional clinical trials or other studies of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other studies, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval for our product candidates at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings that would reduce the potential market for our products or inhibit our ability to successfully commercialize our products;
- be subject to additional post-marketing restrictions and/or requirements; or
- have the product removed from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in preclinical and clinical development or receiving the requisite marketing approvals. We do not know whether any of our preclinical studies or clinical trials will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

### **Risks related to marketing approval of our product candidates**

***If we are not able to obtain, or if there are delays in obtaining, required marketing approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.***

Our product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, current good manufacturing practice, or cGMP, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, including periodic inspections by FDA and other regulatory authorities, requirements regarding the distribution of samples to physicians and recordkeeping. Before we can commercialize any of our product candidates, each such product candidate must be approved by the FDA pursuant to a new drug application, or NDA, in the United States, by the European Medicines Agency, or EMA, pursuant to a marketing authorization application, or MAA, in the European Union, and by similar regulatory authorities outside the United States prior to commercialization.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive and takes several years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have limited experience in planning and conducting the clinical trials required for marketing approvals, and we expect to rely on third-party contract research organizations, or CROs, to assist us in this process. Obtaining marketing

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approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process, and in many cases the inspection of manufacturing facilities by the regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical studies or clinical trials. Our product candidates could be delayed in receiving, or fail to receive, marketing approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submission to obtain marketing approval in the United States or elsewhere;
- third-party manufacturers or our clinical or commercial product candidates may be unable to meet the FDA's cGMP requirements or similar requirements of foreign regulatory authorities; and
- the approval requirements or policies of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

In addition, even if we were to obtain approval, regulatory authorities may approve our product candidates for fewer or more limited indications than we request, 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. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

***Our product candidates may cause undesirable side effects that could delay or prevent their marketing approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.***

Undesirable side effects caused by our product candidates could cause us or the FDA or other regulatory authorities to interrupt, delay or halt our clinical trials and could result in more restrictive labels or the delay or denial of marketing approval by the FDA or other regulatory authorities of our product candidates. Results of



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our clinical trials could reveal a high and unacceptable severity and prevalence of these or other 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. In addition to this, the drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Further, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients, rare and severe side effects of our product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. If our product candidates receive marketing approval and we or others identify undesirable side effects caused by such product candidates (or any other similar drugs) after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of such product candidates;
- regulatory authorities may require the addition of labeling statements, such as a “boxed” warning or a contraindication;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way such product candidates are distributed or administered, conduct additional clinical trials or change the labeling of the product candidates;
- regulatory authorities may require a Risk Evaluation and Mitigation Strategy 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;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide to remove such product candidates from the marketplace after they are approved;
- we could be sued and held liable for injury caused to individuals exposed to or taking our product candidates; and
- our reputation may suffer.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidates and could substantially increase the costs of commercializing our product candidates, if approved, and significantly impact our ability to successfully commercialize our product candidates and generate revenues.

***A Breakthrough Therapy Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process, and does not increase the likelihood that our product candidates will receive marketing approval.***

We do not currently have Breakthrough Therapy Designation for any of our product candidates but may seek such designation. A Breakthrough Therapy Designation may be granted to a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and for which preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as Breakthrough Therapies,

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interaction and communication between the FDA and the sponsor can help to identify the most efficient path for development. Drugs designated as Breakthrough Therapies are also eligible for accelerated approval.

Designation as a Breakthrough Therapy is within the discretion of the FDA. Accordingly, even if we believe, after completing early clinical trials, that one of our product candidates meets the criteria for designation as a Breakthrough Therapy, the FDA may disagree and instead determine not to grant such designation. In any event, the receipt of a Breakthrough Therapy designation by itself for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as a Breakthrough Therapy, the FDA may later decide that such product candidates no longer meet the conditions for qualification.

***A Fast Track Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process and does not increase the likelihood that our product candidates will receive marketing approval.***

We do not currently have Fast Track Designation for any of our product candidates but may seek such designation. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for FDA Fast Track Designation. The FDA has broad discretion whether to grant this designation. Even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program. Many drugs that have received Fast Track Designation have failed to obtain drug approval.

***Any product candidate for which we obtain marketing approval will be subject to extensive post-marketing regulatory requirements and could be subject to post-marketing restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.***

If the FDA or a comparable foreign regulatory authority approves any of our product candidates, activities such as the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. The FDA or a comparable foreign regulatory authority may also impose requirements for costly post-marketing preclinical studies or clinical trials and surveillance to monitor the safety or efficacy of the product. The FDA closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding use of their products, and if we promote our products beyond their approved indications, we may be subject to enforcement actions or prosecution arising from that off-label promotion. Violations of the Federal Food, Drug, and Cosmetic Act relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse and other laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;

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- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance can also result in significant financial penalties. Similarly, failure to comply with the European Union's requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay marketing approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

***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.***

Although we do not currently have any drugs on the market, once we begin commercializing our product candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by federal government and the states and foreign governments in the jurisdictions in which we conduct our business. 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 marketing 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 market, sell and distribute any products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or paying remuneration, directly or indirectly, 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; a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal false claims laws impose criminal and civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government; in addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

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- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal physician payment transparency requirements, sometimes referred to as the “Sunshine Act” under the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, require manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program to report to the Centers for Medicare & Medicaid Services, or CMS, information related to payments and other transfers of value to physicians and teaching hospitals and the ownership and investment interests of physicians and their immediate family members in such manufacturers;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, which also imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- 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 or marketing expenditures; and
- state and foreign laws also govern the privacy and security of health information in certain 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 of products from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

***Current and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.***

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 marketing

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approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and certain disabled people and introduced a reimbursement methodology based on average sales prices for physician-administered drugs. In addition, this law provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this law and future laws could decrease the coverage and price that we will receive for any approved products. While the MMA only applies to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Therefore, any limitations in reimbursement that results from the MMA may result in reductions in payments from private payors.

In March 2010, the ACA became law. The ACA is a sweeping 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.

Among the provisions of the ACA of importance to our potential product candidates are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic products;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service Act's pharmaceutical pricing program;
- new requirements to report financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

The current administration supports a repeal of the ACA and an Executive Order has been signed commanding federal agencies to try to waive or delay requirements of the ACA that impose economic or regulatory burdens on states, families, the health-care industry and others. The Executive Order also declares that the administration will seek the "prompt repeal" of the law and that the government should prepare to "afford the States more flexibility and control to create a more free and open healthcare market." At this time, the

immediate impact of the Executive Order is not clear. In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These new laws may result in additional reductions in Medicare and other healthcare funding.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we will receive for any approved product. Any reduction in payments from Medicare or other government 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 products.

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 FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals, if any, of our product candidates, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing conditions and other requirements.

***Our future growth may depend, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.***

Our future profitability may depend, in part, on our ability to commercialize our product candidates in foreign markets. In order to market and sell our products in the European Union and many other jurisdictions, we or our third-party collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and economic areas and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The marketing approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We or these third parties may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by 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 FDA. Additionally, a failure or delay in obtaining marketing approval in one jurisdiction may have a negative effect on the marketing approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials. Obtaining foreign marketing approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market. If we obtain approval of our product candidates and ultimately commercialize our product candidates in foreign markets, we would be subject to additional risks and uncertainties, including:

- our customers' ability to obtain reimbursement for our product candidates in foreign markets;
- our inability to directly control commercial activities because we are relying on third parties;

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- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;
- different medical practices and customs in foreign countries affecting acceptance in the marketplace;
- import or export licensing requirements;
- longer accounts receivable collection times;
- longer lead times for shipping;
- language barriers for technical training;
- reduced or no protection on pharmaceutical products or their use in some foreign countries;
- the unwillingness of courts in some foreign jurisdictions to enforce patents even when valid and infringed in that country;
- the possibility of pre-grant or post-grant review proceedings in certain foreign countries that allow a petitioner to hold up patent rights for an extended period or permanently by challenging the patent filing at the patent office of that country;
- the possibility of a compulsory license issued by a foreign country that allows a third party company or a government to manufacture, use or sell our products with a government-set low royalty to us;
- the existence of additional potentially relevant third-party intellectual property rights;
- foreign currency exchange rate fluctuations; and
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute.

Foreign sales of our product candidates could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

### ***Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.***

In some countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. 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 harmed, possibly materially.

### ***If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.***

We 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 our use of hazardous materials, we could be held liable for any resulting damages, and the amount of the liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against other 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, hazardous or radioactive 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 discovery, preclinical development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

## **Risks related to our dependence on third parties**

***We rely on, and expect to continue to rely on, third parties to conduct our clinical trials for our product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our product candidates, and our business could be substantially harmed.***

We do not have the ability to independently conduct clinical trials. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to conduct or otherwise support clinical trials for our product candidates. We expect to rely heavily on these parties for performance of clinical trials for our product candidates. Nevertheless, we will be responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards.

We, our investigators, and our CROs will be required to comply with regulations, including good clinical practice, or GCP, and other related requirements for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for any drugs in clinical development. The FDA enforces GCPs through periodic inspections of clinical trial sponsors, principal investigators and trial sites. If we, our investigators or our CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be called into question and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before considering our marketing applications for approval. We cannot assure you that, upon inspection, the FDA will determine that any of our future clinical trials will comply with GCPs.

In addition, our clinical trials must be conducted with product candidates produced under cGMPs. Our failure or the failure of our investigators or CROs to comply with these requirements may require us to repeat clinical trials, which would delay the marketing approval process and could also subject us to enforcement action. We also are required to register certain clinical trials and post the results of such completed clinical trials involving product candidates for which we receive marketing approval on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.



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Although we intend to design the clinical trials for our product candidates, CROs will administer all of the clinical trials. As a result, many important aspects of our development programs, including their conduct and timing, will be outside of our direct control. Our reliance on third parties to conduct future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues;
- undergo changes in priorities or become financially distressed;
- make errors in the design, management or retention of our data or data systems; and/or
- form relationships with other entities, some of which may be our competitors.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If the CROs do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, marketing approval and commercialization of our product candidates may be delayed, we may not be able to obtain marketing approval and commercialize our product candidates, or our development program may be materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced 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, any clinical trials such CROs are associated with may be extended, delayed or terminated, and we may not be able to obtain marketing approval for or successfully commercialize our product candidates. As a result, we believe that our financial results and the commercial prospects for our product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

***We contract with third parties for the manufacture of our product candidates for preclinical studies and clinical trials and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.***

We do not currently own or operate, nor do we have any plans to establish in the future, any manufacturing facilities or personnel. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical studies and clinical trials, as well as for the commercial manufacture of our drugs if any of our product candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or drugs or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

The facilities used to manufacture our product candidates must be evaluated by the FDA pursuant to inspections that will be conducted after we submit our marketing applications to the FDA to ensure compliance with cGMP. We do not control the manufacturing process of, and will be completely dependent on, our contract manufacturers for compliance with cGMPs in connection with the manufacture of our product candidates. If our

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contract manufacturers cannot successfully manufacture material that conforms to our specifications and the regulatory requirements of the FDA or others, we will not be able to use the products produced at their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority finds that these facilities do not comply with cGMP, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain marketing approval for or market our product candidates, if approved. Further, our failure, or the failure of our third party manufacturers, to comply with these or other applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, if approved, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business and supplies of our product candidates.

We may be unable to establish any agreements with third-party manufacturers or do so on acceptable terms. Even if we are able to establish agreements with third party manufacturers, reliance on third party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Our product candidates and any other drugs that we may develop may compete with other product candidates and approved drugs for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or drugs may adversely affect our future profit margins and our ability to commercialize any drugs that receive marketing approval on a timely and competitive basis.

***We, or our third-party manufacturers, may be unable to successfully scale-up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing approved products, if any.***

In order to conduct large-scale clinical trials of our product candidates, we will need to manufacture them in large quantities. We, or any of our manufacturing partners, may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If we, or any manufacturing partners, are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing, and clinical trials of that product candidate may be delayed or infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

***The third parties upon which we rely for the supply of the active pharmaceutical ingredients, formulations, and drug products are our sole sources of supply and have limited capacity, and the loss of any of these suppliers could harm our business.***

The active pharmaceutical ingredients, or API, formulations and drug products for our product candidates are supplied to us from single source suppliers with limited capacity. Our ability to successfully develop our product candidates, and to ultimately supply our commercial drugs in quantities sufficient to meet the market demand, depends in part on our ability to obtain the API, formulations and drug products in accordance with cGMP requirements and in sufficient quantities for commercialization and clinical trials. We do not currently have arrangements in place for a redundant or second-source supply of any such API, formulation or drug product in the event any of our current suppliers cease their operations for any reason.

We do not know whether our suppliers will be able to meet our demand, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance. While our suppliers have generally met our demand for their products on a timely basis in the past, they may subordinate our needs in the future to their other customers.

For all of our product candidates, we intend to identify and qualify additional manufacturers to provide API, formulations and drug products prior to submission of an NDA to the FDA and/or an MAA to the EMA. Establishing additional or replacement suppliers for the API, formulations and drug products for our product candidates, if required, may not be accomplished quickly. If we are able to find a replacement supplier, such replacement supplier would need to be qualified, or we may have to perform comparative studies comparing the drug product from a new manufacturer to the product used in any completed clinical trials. All of this may require additional marketing approval, which could result in further delay. While we seek to maintain adequate inventory of the API, formulations and drug products for our product candidates, any interruption or delay in the supply of components or materials, or our inability to obtain such API, formulation and drug product from alternate sources at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

***We may seek to establish additional collaborations, and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.***

Our drug development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. For some of our product candidates, we may decide to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing drugs and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. The terms of any collaborations or other arrangements that we may establish may not be favorable to us.

We may also be restricted under existing collaboration agreements from entering into future agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and

document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate drug revenue.

In addition, any collaboration that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations. Any such collaboration may require us to incur non-recurring or other charges, increase our near- and long-term expenditures and pose significant integration or implementation challenges or disrupt our management or business. These transactions would entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration or integration costs, write-down of assets or goodwill or impairment charges, increased amortization expenses and difficulty and cost in facilitating the collaboration.

Lastly, disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the development process or commercializing the applicable product candidate and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision-making authority. Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation.

## **Risks related to the commercialization of our product candidates**

***Even if any of our product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.***

If any of our product candidates receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the timing of our receipt of any marketing approvals;
- the terms of any approvals and the countries in which approvals are obtained;
- the efficacy and safety and potential advantages and disadvantages compared to alternative treatments;

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- the prevalence and severity of any side effects associated with our products;
- the indications for which our products are approved;
- adverse publicity about our products or favorable publicity about competing products;
- the approval of other products for the same indications as our products;
- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the success of our physician education programs;
- the strength of our marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement, including patient cost-sharing programs such as copays and deductibles; and
- any restrictions on the use of our products together with other medications.

If any product we commercialize fails to achieve market acceptance, it could have a material and adverse effect on our business, financial condition, results of operation and prospects.

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

The development and commercialization of new drug products is highly competitive. We face competition with respect to our current product candidates and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our product candidates. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. If trilaciclib is approved, it would compete with (a) existing growth factor support treatments, (b) if approved, rovalpituzumab tesirine (Rova-T), an antibody drug conjugate currently being developed by Abbvie for the treatment of patients with SCLC, (c) if approved, the multiple immune checkpoint inhibitors in clinical trials for the treatment of patients with SCLC and TNBC, and (d) multiple approved drugs or drugs that may be approved in the future for indications for which we may develop trilaciclib. If G1T38 is approved, it would compete with (a) Pfizer's approved CDK4/6 inhibitor, Ibrance, (b) if approved, the CDK4/6 inhibitor product candidates currently in clinical development by Eli Lilly and by Novartis, (c) if approved, other non-selective CDK4/6 inhibitor product candidates in clinical development, including product candidates being developed by FLX Bio and OncoMed Pharmaceuticals, and (d) multiple approved drugs or drugs that may be approved in the future for indications for which we may develop G1T38. If

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G1T48 is approved, it would compete with (a) the approved intramuscular SERD, Faslodex, being marketed by AstraZeneca, (b) if approved, other oral SERDs in development by Radius Health, Genentech, AstraZeneca and Novartis; and (c) multiple approved drugs or drugs that may be approved in the future for indications for which we may develop G1T48.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other marketing approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market and/or slow our marketing approval. Some of the important competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price and the availability of reimbursement from government and other third-party payors.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical studies, conducting clinical trials, obtaining marketing approvals and marketing approved products than we do. 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 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 complementary to, or necessary for, our programs.

***Even if we are able to commercialize any product candidates, such drugs may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.***

The regulations that govern marketing approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product candidate, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product candidate in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Our ability to commercialize any product candidates successfully also will depend in part on the extent to which coverage and reimbursement for these product candidates and related treatments will be available from government authorities, private health insurers and other organizations. In the United States, the principal decisions about reimbursement for new medicines are typically made by the CMS, an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare. Private payors tend to follow CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs are generally covered and paid for in the United States, but have not been approved for reimbursement in certain European countries. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of payments for particular drugs. Increasingly, third-party payors are requiring that drug companies provide them with predetermined

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discounts from list prices and are challenging the prices charged for drugs. We cannot be sure that coverage will be available for any product candidate that we commercialize and, if coverage is available, the level of payments. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

In addition to CMS and private payors, professional organizations such as the National Comprehensive Cancer Network and the American Society of Clinical Oncology can influence decisions about reimbursement for new medicines by determining standards of care. In addition, many private payors contract with commercial vendors who sell software that provide guidelines that attempt to limit utilization of, and therefore reimbursement for, certain products deemed to provide limited benefit to existing alternatives. Such organizations may set guidelines that limit reimbursement or utilization of our products.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for 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 not be made permanent. 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. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved drugs that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize drugs and our overall financial condition.

***We currently have no marketing and sales force. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenues.***

We do not currently have a sales or marketing infrastructure and have limited experience in the sale, marketing or distribution of drugs. To achieve commercial success for any approved product candidate for which we retain sales and marketing responsibilities, we must build our sales, marketing, managerial, and other non-technical capabilities or make arrangements with third parties to perform these services. There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any drug launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our product candidates on our own include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future drugs;
- the lack of complementary drugs to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

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If we enter into arrangements with third parties to perform sales, marketing and distribution services, our drug revenues or the profitability of these drug revenues to us are likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so when needed or on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates that receive marketing approval or any such commercialization may experience delays or limitations. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our business, results of operations, financial condition and prospects will be materially adversely affected.

### ***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 evaluation of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will 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;
- 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 participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to successfully commercialize any products that we may develop.

We currently hold \$5.0 million in product liability insurance coverage in the aggregate, with a per incident limit of \$5.0 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. 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.

### **Risks related to our intellectual property**

***If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired and, if we infringe the valid patent rights of others, we may be prevented from making, using or selling our products or may be subject to damages or penalties.***

Our success depends in large part on our ability to obtain and maintain patents in the United States and other countries that adequately protect our proprietary technology and products. We seek to protect our proprietary



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position by filing patent applications in the United States and in foreign countries that cover our novel product candidates and their uses, pharmaceutical formulations and dosages, and processes for the manufacture of them. Our patent portfolio currently includes both patents and patent applications.

The patent prosecution process is expensive and time-consuming. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions. Under the laws of certain jurisdictions, patents or other intellectual property rights may be unavailable or limited in scope. It is also possible that we will fail to identify patentable aspects of our research and development before it is too late to obtain patent protection.

We currently solely own or exclusively license our patents and patent applications and we have the right to control the prosecution of the in-licensed patent applications. In the future, we may choose to in-license additional patents or patent applications from third parties that we conclude are useful or necessary for our business goals. We may not have the right to control the preparation, filing, prosecution or maintenance of such patent applications. Therefore, if we do license additional patents or patent applications in the future, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. 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 U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The U.S. Patent and Trademark Office, or U.S. PTO, recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, became effective on March 16, 2013. The Leahy-Smith Act also created certain new administrative adversarial proceedings, discussed below. 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 and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

The U.S. Supreme Court has issued opinions in patent cases in the last few years that many consider may weaken patent protection in the United States, either by narrowing the scope of patent protection available in certain circumstances, holding that certain kinds of innovations are not patentable or generally otherwise making it easier to invalidate patents in court. Additionally, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain patent protection for our proprietary technology or our ability to enforce our proprietary technology.

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Depending on future actions by the U.S. Congress, the U.S. courts, the U.S. PTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and in other countries. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. Likewise, a court could uphold and enforce a third party patent that it rules we have infringed, which would subject us to damages or prevent us from making, using or selling our products.

During patent prosecution in the United States and in most foreign countries, a third party can submit prior art or arguments to the reviewing patent office to attempt to prevent the issuance of a competitor's patent. For example, our pending patent applications may be subject to a third-party preissuance submission of prior art to the U.S. PTO or an Observation in Europe. Such submission may convince the receiving patent office not to issue the patent. In addition, if the breadth or strength of protection provided by our patents and patent applications is reduced by such third party submission, it could affect the value of our resulting patent or dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

The risks described here pertaining to our patents and other intellectual property rights also apply to any intellectual property rights that we may license in the future, and any failure to obtain, maintain and enforce these rights could have a material adverse effect on our business. In some cases we may not have control over the prosecution, maintenance or enforcement of the patents that we license, and our licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain and enforce the licensed patents. Any inability on our part to protect adequately our intellectual property may have a material adverse effect on our business, operating results and financial position.

***Some intellectual property may have been discovered through government funded programs and thus may be subject to federal regulations such as "march-in" rights, certain reporting requirements and a preference for U.S.-based companies. Compliance with such regulations may limit our exclusive rights, and limit our ability to contract with non-U.S. manufacturers.***

Many of our intellectual property rights were generated through the use of U.S. government funding and are therefore subject to certain federal regulations. As a result, the U.S. government may have certain rights to intellectual property embodied in our current or future product candidates pursuant to the Bayh-Dole Act of 1980, or Bayh-Dole Act. These U.S. government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a

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third party if it determines that: (i) adequate steps have not been taken to commercialize the invention; (ii) government action is necessary to meet public health or safety needs; or (iii) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in rights"). The U.S. government also has the right to take title to these inventions if we fail to disclose the invention to the government and fail to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U.S. government requires that any products embodying the subject invention or produced through the use of the subject invention be manufactured substantially in the United States. The manufacturing preference requirement can be waived if the owner of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. manufacturers may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property. To the extent any of our current or future intellectual property is generated through the use of U.S. government funding, the provisions of the Bayh-Dole Act may similarly apply.

***We may become involved in administrative adversarial proceedings in the U.S. PTO or in the patent offices of foreign countries brought by a third party to attempt to cancel or invalidate our patent rights, which could be expensive, time consuming and cause a loss of patent rights.***

The Leahy-Smith Act created for the first time new procedures to challenge issued patents in the United States, including post-grant review and *inter partes* review proceedings, which some third parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent with a priority date of March 16, 2013 or later, a petition for post-grant review can be filed by a third party in a nine month window from issuance of the patent. A petition for *inter partes* review can be filed immediately following the issuance of a patent if the patent was filed prior to March 16, 2013. A petition for *inter partes* review can be filed after the nine month period for filing a post-grant review petition has expired for a patent with a priority date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of challenge, whereas *inter partes* review proceedings can only be brought to raise a challenge based on published prior art. These administrative adversarial actions at the U.S. PTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, use a lower burden of proof than used by U.S. federal courts, and interpret patent claims using a "broadest reasonable construction" instead of "plain and ordinary meaning," which is used in court litigation. Because of these differences between U.S. administrative and judicial adversarial patent proceedings, it is generally considered easier for a competitor or third party to have a U.S. patent cancelled in a patent office post-grant review or *inter partes* review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by a third party in such a U.S. patent office proceeding, there is no guarantee that we will be successful in defending the patent, which would result in a loss of the challenged patent right to us.

Opposition or invalidation procedures are also available in most foreign countries. Many foreign authorities, such as the authorities at the European Patent Office, have only post-grant opposition proceedings, however, certain countries, such as India, have both pre-grant and post-grant opposition proceedings. These procedures have been used frequently against pharmaceutical patents in foreign countries. For example, in some foreign countries, these procedures are used by generic companies to hold up an innovator's patent rights as a means to allow the generic company to enter the market. This activity is particularly prevalent in India, China and South America and may become more prevalent in Africa and other parts of Asia as certain countries reach more established economies. If any of our patents are challenged in a foreign opposition or invalidation proceeding, we could face significant costs to defend our patents, and we may not be successful. Uncertainties

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resulting from the initiation, continuation or loss of such proceedings could have a material adverse effect on our ability to compete in the market place. Further, in many foreign jurisdictions, the losing party must pay the attorneys' fees of the winning party, which can be substantial.

***We may have to file one or more lawsuits in court to prevent a third party from selling a product or using a product in a manner that infringes our patent, which could be expensive, time consuming and unsuccessful, and ultimately result in the loss of our proprietary market.***

Because competition in our industry is intense, competitors may infringe or otherwise violate our issued patents, patents of our licensors or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement lawsuits, which can be expensive and time consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. We may also elect to enter into license agreements in order to settle patent infringement claims or to resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could be significant. 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.

Because our CDK 4/6 inhibitor candidates are small molecules, after commercialization they will be subject to the patent litigation process of the Hatch Waxman Act, which allows a generic company to submit an Abbreviated New Drug Application, or ANDA, to the FDA to obtain approval to sell our drug using bioequivalence data only. Under the Hatch Waxman Act, since our candidates will be considered new chemical entities, we will have the opportunity to list all of our patents that cover our drug product or its method of use in the FDA's compendium of "Approved Drug Products with Therapeutic Equivalence Evaluation," sometimes referred to as the FDA's Orange Book. A generic company can submit an ANDA to the FDA four years after our drug approval. The submission of the ANDA by a generic company is considered a technical act of patent infringement. The generic company can certify that it will wait until the natural expiration date of our listed patents to sell a generic version of our product or can certify that one or more of our listed patents are invalid, unenforceable, or not infringed. If the latter, we will have 45 days to bring a patent infringement lawsuit against the generic company. This will initiate a challenge to one or more of our Orange Book listed patents based on arguments from the generic company that either our patent is invalid, unenforceable or not infringed. Under the Hatch Waxman Act, if a lawsuit is brought, the FDA is prevented from issuing a final approval on the generic drug until the earlier of seven-and-a-half years from our drug approval or a final decision of a court holding that our asserted patent claims are invalid, unenforceable or not infringed. If we do not properly list our relevant patents in the Orange Book, or timely file a lawsuit in response to a certification from a generic company under an ANDA, or if we do not prevail in the resulting patent litigation, we can lose our proprietary market, which can rapidly become generic. Further, even if we do correctly list our relevant patents in the Orange Book, bring a lawsuit in a timely manner and prevail in that lawsuit, it may be at a very significant cost to us of attorneys' fees and employee time and distraction over a long period. Further, it is common for more than one generic company to try to sell an innovator drug at the same time, and so we may be faced with the cost and distraction of multiple lawsuits. We may also determine it is necessary to settle the lawsuit in a manner that allows the generic company to enter our market prior to the expiration of our patent or otherwise in a manner that adversely affects the strength, validity or enforceability of our patent.

***A number of pharmaceutical companies have been the subject of intense review by the U.S. Federal Trade Commission or a corresponding agency in another country based on how they have conducted or settled drug patent litigation, and certain reviews have led to an allegation of an anti-trust violation, sometimes resulting in a fine or loss of rights. We cannot be sure that we would not also be subject to such a review or that the result of the review would be favorable to us, which could result in a fine or penalty.***

The U.S. Federal Trade Commission, or FTC, has brought a number of lawsuits in federal court in the past few years to challenge Hatch Waxman ANDA litigation settlements between innovator companies and generic companies as anti-competitive. The FTC has taken an aggressive position that anything of value is a payment, whether money is paid or not. Under their approach, if an innovator as part of a patent settlement agrees not to launch or delay launch of an authorized generic during the 180-day period granted to the first generic company to challenge an Orange Book listed patent covering an innovator drug, or negotiates a delay in entry without payment, the FTC may consider it an unacceptable reverse payment. The biopharmaceutical industry argues that such agreements are rational business decisions to dismiss risk and are immune from antitrust attack if the terms of the settlement are within the scope of the exclusionary potential of the patent. In 2013, the U.S. Supreme Court, in a five-to-three decision in *FTC v. Actavis, Inc.* rejected both the biopharmaceutical industry's and FTC's arguments with regard to so-called reverse payments, and held that whether a "reverse payment" settlement involving the exchange of consideration for a delay in entry is subject to an anticompetitive analysis depends on five considerations: (a) the potential for genuine adverse effects on competition; (b) the justification of payment; (c) the patentee's ability to bring about anticompetitive harm; (d) whether the size of the payment is a workable surrogate for the patent's weakness; and (e) that antitrust liability for large unjustified payments does not prevent litigating parties from settling their lawsuits, for example, by allowing the generic to enter the market before the patent expires without the patentee's paying the generic. Furthermore, whether a reverse payment is justified depends upon its size, its scale in relation to the patentee's anticipated future litigation costs, its independence from other services for which it might represent payment, as was the case in *Actavis*, and the lack of any other convincing justification. The Court held that reverse payment settlements can potentially violate antitrust laws and are subject to the standard antitrust rule-of-reason analysis, with the burden of proving that an agreement is unlawful on the FTC and leaving to lower courts the structuring of such rule of reason analysis. If we are faced with drug patent litigation, including Hatch Waxman litigation with a generic company, we could be faced with such an FTC challenge based on that activity, including how or whether we settle the case, and even if we strongly disagree with the FTC's position, we could face a significant expense or penalty.

***Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.***

We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights covering our products and technology, including interference or derivation proceedings before the U.S. PTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. 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, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

***We may not be able to effectively enforce our intellectual property rights throughout the world.***

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and therefore we only file for patent protection in selected countries. The requirements for patentability may differ in certain countries, particularly in developing countries. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws.

The laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, Europe, India, China and certain other countries do not allow patents for methods of treating the human body. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions that do not favor patent protection on drugs. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drugs and, further, may export otherwise infringing drugs to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These drugs may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Furthermore, while we intend to protect our intellectual property rights in the major markets for our product candidates, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

A number of foreign countries have stated that they are willing to issue compulsory licenses to patents held by innovator companies on approved drugs to allow the government or one or more third party companies to sell the approved drug without the permission of the innovator patentee where the foreign government concludes it is in the public interest. India, for example, has used such a procedure to allow domestic companies to make and sell patented drugs without innovator approval. There is no guarantee that patents covering any of our drugs will not be subject to a compulsory license in a foreign country, or that we will have any influence over if or how such a compulsory license is granted. Further, Brazil allows its regulatory agency ANVISA to participate in deciding whether to grant a drug patent in Brazil, and patent grant decisions are made based on several factors, including whether the patent meets the requirements for a patent and whether such a patent is deemed in the country's interest. In addition, several other countries have created laws that make it more difficult to enforce drug patents than patents on other kinds of technologies. Further, under the treaty on the Trade-Related Aspects of Intellectual Property, or TRIPS, as interpreted by the Doha Declaration, countries in which drugs are manufactured are required to allow exportation of the drug to a developing country that lacks adequate manufacturing capability. Therefore, our drug markets in the United States or foreign countries may be affected by the influence of current public policy on patent issuance, enforcement or involuntary licensing in the healthcare area.

In addition, in November 2015, members of the World Trade Organization, or the WTO, which administers TRIPS, voted to extend the exemption against enforcing pharmaceutical drug patents in least developed countries until 2033. We currently have no patent applications filed in least developed countries, and our current intent is not to file in these countries in the future, at least in part due to this WTO pharmaceutical patent exemption.

***Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.***

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the U.S. PTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

***Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.***

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. 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 and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

***If we fail to comply with our obligations under the license agreement with the University of Illinois, we could lose license rights that are necessary for developing and commercializing G1T48.***

Our exclusive license with the University of Illinois, or UIC, for technology relating to G1T48 imposes various development, commercialization, royalty payment, diligence and other obligations on us. Specifically, we are required to:

- pay UIC a minimum annual fee and potential milestone payments;
- pay UIC low single-digit royalties on all net sales of products and a share of any sublicensing revenues;
- use commercially reasonable efforts to bring products to market;
- provide financial reports to UIC;
- file, prosecute, defend and maintain patent rights; and
- indemnify UIC against certain claims and maintain insurance coverage.

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If we breach any of these obligations, UIC may have the right to terminate the license, which would result in our being unable to develop, manufacture and sell products that are covered by the licensed technology, including G1T48, or in a competitor's gaining access to the licensed technology.

***We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.***

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these employees or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we fail in prosecuting or 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 prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

***If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.***

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We seek to protect our confidential proprietary information, in part, by entering into confidentiality and invention or patent assignment agreements with our employees and consultants, however, we cannot be certain that such agreements have been entered into with all relevant parties. Moreover, to the extent we enter into such agreements, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.



## Risks related to employee matters, managing growth and other risks related to our business

***We currently have a limited number of employees, and our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.***

We are an early-stage clinical development company, and, as of February 1, 2017, had only 31 employees and five executive officers. We are highly dependent on the research and development, clinical and business development expertise of Mark A. Velleca, M.D., Ph.D., our President and Chief Executive Officer, Rajesh Malik, M.D., our Chief Medical Officer, Gregory Mossinghoff, our Chief Business Officer, Jay Strum, Ph.D., our Chief Scientific Officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. Other than for Dr. Velleca and Dr. Malik, we do not maintain "key person" insurance for any of our executives or other employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Recruiting and retaining qualified scientific, clinical, manufacturing, sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, obtain marketing approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific personnel. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

***We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.***

To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these development activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our product candidates. If our management is unable to effectively manage our expected development and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to

commercialize our product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future development and expansion of our company.

***Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.***

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the recent global financial crisis, could result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business, and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

***Our business and operations could suffer in the event of system failures.***

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Furthermore, we have little or no control over the security measures and computer systems of our third-party CROs and other contractors and consultants. While we have not experienced any such system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of clinical trial data for our product candidates could result in delays in our marketing 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 other data or applications relating to our technology or product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our product candidates could be delayed.

***Our employees, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.***

We are exposed to the risk that our employees, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We intend to adopt, prior to the completion of this offering, a code of conduct applicable to all of our employees, but it is not always possible to identify and deter misconduct by employees and other third parties, 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 comply

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with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. 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, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

***We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may be more profitable or for which there is a greater likelihood of success.***

Because we have limited financial and managerial resources, we focus on specific product candidates. As a result, we may forgo or delay pursuit of opportunities with other product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, 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.

***We may acquire businesses or drugs, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.***

We may acquire additional businesses or drugs, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new drugs resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, we will achieve the expected synergies to justify the transaction.

***We or the third parties upon which we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.***

Earthquakes or other natural disasters could severely disrupt our operations and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business.

## Risks related to our common stock and this offering

***An active trading market for our common stock may not develop, and you may not be able to resell your shares at or above the initial public offering price.***

Prior to this offering, there has been no public market for our common stock. Although we have applied to have our common stock approved for listing on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering at or above the initial public offering price or at the time that you would like to sell, if at all.

***The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock in this offering.***

The initial public offering price for our shares has been determined by negotiations between us and the representatives of the underwriters and may not be indicative of prices that will prevail in the trading market. The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- results of preclinical and clinical trials of our product candidates, including trilaciclib, G1T38 and G1T48;
- results of clinical trials of our competitors' products;
- regulatory actions with respect to our products or our competitors' products;
- actual or anticipated fluctuations in our financial condition and operating results;
- publication of research reports by securities analysts about us or our competitors or our industry;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, collaborations, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- the passage of legislation or other regulatory developments in the United States and other countries affecting us or our industry;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- sales of our common stock by us, our insiders or our other stockholders;
- speculation in the press or investment community;
- announcement or expectation of additional financing efforts;
- changes in accounting principles;
- changes in the structure of healthcare payment systems;
- terrorist acts, acts of war or periods of widespread civil unrest;

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- natural disasters and other calamities;
- changes in market conditions for pharmaceutical and biopharmaceutical stocks;
- changes in general market, industry and economic conditions; and
- the other factors described in this “Risk Factors” section.

In addition, the stock market has experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks. The volatility of pharmaceutical, biotechnology and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. In the past, securities class action litigation has often been initiated against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and divert our management’s attention and resources, and could also require us to make substantial payments to satisfy judgments or to settle litigation.

***After this offering, our executive officers, directors and principal stockholders and their affiliates, if they choose to act together, will continue to have the ability to exercise significant influence over all matters submitted to stockholders for approval, which will limit your ability to influence corporate matters and could delay or prevent a change in corporate control.***

Upon the closing of this offering, our executive officers and directors, combined with our stockholders who owned more than 5% of our outstanding common stock before this offering and their respective affiliates, will, in the aggregate, beneficially own shares representing approximately % of our outstanding capital stock, assuming no exercise of the underwriters’ option to acquire additional common stock in this offering and assuming we issue the number of shares of common stock as set forth on the cover page of this prospectus. As a result, if these stockholders were to choose to act together, they would be able to influence our management and affairs and the outcome of matters submitted to our stockholders for approval, including the election of directors and any sale, merger, consolidation, or sale of all or substantially all of our assets. These stockholders acquired their shares of common stock for substantially less than the price of the shares of common stock being acquired in this offering, and these stockholders may have interests, with respect to their common stock, that are different from those of investors in this offering and the concentration of voting power among these stockholders may have an adverse effect on the price of our common stock. This concentration of ownership control may adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change in control;
- entrenching our management and the board of directors;
- impeding a merger, consolidation, takeover or other business combination involving us that other stockholders may desire; and/or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

See the “Principal Stockholders” section of this prospectus for more information regarding the ownership of our outstanding common stock by our executive officers, directors, principal stockholders and their affiliates.

***Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.***

Provisions in our certificate of incorporation and our by-laws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of our company that

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stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer rejected by our board of directors were considered beneficial by some stockholders. Among other things, these provisions:

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least two-thirds of the voting power of all of the then-outstanding shares of capital stock that would be entitled to vote generally in the election of directors to amend or repeal specified provisions of our certificate of incorporation or by-laws that will become effective upon the closing of this offering.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

***Our certificate of incorporation includes a forum selection clause, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.***

Our certificate of incorporation that will become effective upon the closing of this offering provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any stockholder to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or by-laws, or (iv) any action asserting a claim governed by the internal affairs doctrine; in all cases subject to the court's having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to the

foregoing provisions. This forum selection provision in our certificate of incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us. It is also possible that, notwithstanding the forum selection clause included in our certificate of incorporation, a court could rule that such a provision is inapplicable or unenforceable.

***If you purchase shares of common stock in this offering, you will suffer substantial and immediate dilution of your investment.***

You will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. The initial public offering price of our common stock will be substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on an assumed initial public offering price of \$ \_\_\_\_\_ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ \_\_\_\_\_ per share, representing the difference between our pro forma net tangible book value per share, after giving effect to this offering, and the assumed initial public offering price. In addition, investors purchasing common stock in this offering will contribute \_\_\_\_\_ % of the total amount invested by stockholders since inception but will only own \_\_\_\_\_ % of the shares of common stock outstanding, assuming no exercise of the underwriters' option to acquire additional common stock in this offering and assuming we issue the number of shares of common stock as set forth on the cover page of this prospectus. In the past, we issued options and other securities to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding securities are ultimately exercised, investors purchasing common stock in this offering will sustain further dilution. See the "Dilution" section for a more detailed description of the dilution to new investors in the offering.

***If securities or industry analysts do not publish research or reports about our business, or if they publish negative evaluations of our stock or negative reports about our business, our stock price and trading volume could decline.***

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. We may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, there can be no assurance that analysts will cover us or provide favorable coverage. If one or more of the analysts who covers us downgrades our stock or changes his or her opinion of our stock, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

***We have broad discretion in the use of the net proceeds from this offering and may not use them effectively, which could affect our results of operations and cause our stock price to decline.***

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the "Use of Proceeds" section of this prospectus and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Our management could spend the net proceeds from this offering in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

***A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.***

Sales of a substantial number of shares of our common stock in the public market could occur at any time after the expiration of the lock-up agreements described in the "Underwriting" section of this prospectus. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have \_\_\_\_\_ shares of common stock outstanding. This includes the \_\_\_\_\_ shares that we are selling in this offering, which may be resold in the public market immediately. The remaining \_\_\_\_\_ shares, or \_\_\_\_\_ % of our outstanding shares after this offering, are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold, subject to any applicable volume limitations under federal securities laws with respect to affiliate sales, in the near future.

In addition, as of \_\_\_\_\_, 2017, there were \_\_\_\_\_ shares subject to outstanding warrants, \_\_\_\_\_ shares subject to outstanding options and an additional \_\_\_\_\_ shares reserved for future issuance under our employee benefit plans that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements, the lock-up agreements and Rules 144 and 701 under the Securities Act of 1933, as amended. Moreover, after this offering, holders of an aggregate of \_\_\_\_\_ shares of our common stock and holders of warrants to purchase \_\_\_\_\_ shares of our common stock will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If such holders, by exercising their registration rights, cause a large number of securities to be registered and sold into the public market, these sales could have an adverse effect on the market price for our common stock. We also intend to register all shares of common stock that we may issue under our employee benefit plans, including our 2017 Employee, Director and Consultant Equity Plan. Once we register these shares and they are issued in accordance with the terms of the plans, they can be freely sold in the public market upon issuance, subject to the lock-up agreements and the restrictions imposed on our affiliates under Rule 144. For more information, see the "Shares Eligible for Future Sale" section.

***We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.***

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We will remain an emerging growth company until the earlier of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1 billion or more; (ii) the last day of the fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;



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- providing only two years of audited financial statements in addition to any required unaudited interim financial statements and a correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in our initial registration statement;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of reduced reporting burdens in this prospectus. In particular, we have provided only two years of audited financial statements and have not included all of the executive compensation information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

***We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.***

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Stock Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often 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 as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will first be required to furnish a report by our management on our internal control over financial reporting for the year ending December 31, 2017. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to

document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

***Our ability to use our net operating loss carryforwards and certain other tax attributes to offset future taxable income may be limited.***

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change," is subject to limitations on its ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes. For these purposes, an ownership change generally occurs where the equity ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a three year period. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which are outside the Company's control. These ownership changes may subject our existing NOLs or credits to substantial limitations under Sections 382 and 383. Accordingly, we may not be able to utilize a material portion of our NOLs or credits. As of December 31, 2016, we had federal NOLs of approximately \$46.8 million. Limitations on our ability to utilize those NOLs to offset U.S. federal taxable income could potentially result in increased future tax liability to us. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

***Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.***

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

## Special note regarding forward-looking statements

This prospectus contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- our use of the net proceeds from this offering;
- the accuracy of our estimates regarding the number of patients with CDK4/6-independent or -dependent tumors, expenses, future revenues, capital requirements and our needs for additional financing;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- the timing or likelihood of regulatory filing and approvals;
- the commercialization of our product candidates, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- our ability to enter into strategic arrangements and/or collaborations and the potential benefits of such arrangements;
- our financial performance; and
- developments relating to our competitors and our industry.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the “Risk Factors” section and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to new information, actual results or to changes in our expectations, except as required by law.

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You should read this prospectus and the documents that we reference in this prospectus and have filed with the Securities and Exchange Commission, or SEC, as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information.

## Use of proceeds

We estimate that we will receive net proceeds of approximately \$            million from the sale of the shares of common stock offered in this offering, or approximately \$            million, if the underwriters exercise their option to purchase additional shares in full, based on an assumed initial public offering price of \$            per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$            per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately \$            million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately \$            million, assuming the initial public offering price stays the same.

The principal purposes of this offering are to increase our financial flexibility, create a public market for our common stock and to facilitate our access to the public equity markets. We intend to use the net proceeds from this offering as follows:

- approximately \$            million to advance development of trilaciclib;
- approximately \$            million to advance development of G1T38;
- approximately \$            million to advance development of G1T48; and
- the balance for working capital and general corporate purposes.

The timing and costs associated with obtaining regulatory approval for a product candidate are highly uncertain and are dependent upon many factors that are beyond our control. Accordingly, we do not believe it is possible at this time to accurately project to what stage of clinical development the proceeds of this offering will allow us to advance our product candidates.

We believe opportunities may exist from time to time to expand our current business through acquisitions or in-licenses of complementary companies, medicines or technologies. While we have no current agreements, commitments or understandings for any specific acquisitions or in-licenses at this time, we may use a portion of the net proceeds for these purposes.

Although we currently anticipate that we will use the net proceeds from this offering as described above, there may be circumstances where a reallocation of funds is necessary. Due to the uncertainties inherent in the product development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. The amounts and timing of our actual expenditures will depend upon numerous factors, including our sales and marketing and commercialization efforts, demand for our drugs, our operating costs and the other factors described under the "Risk Factors" section of this prospectus. Accordingly, our management will have flexibility in applying the net proceeds from this offering. An investor will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use the proceeds.

Pending their use as described above, we plan to invest the net proceeds in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or guaranteed obligations of the U.S. government.

## **Dividend policy**

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and future earnings, if any, for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, our financial condition, our capital requirements, general business conditions, our future prospects and other factors that our board of directors may deem relevant. Investors should not purchase our common stock with the expectation of receiving cash dividends.

## Capitalization

The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2016:

- on an actual basis;
- on a pro forma basis to reflect the conversion of all outstanding shares of our preferred stock into an aggregate of 56,799,234 shares of common stock prior to the completion of this offering and the conversion of a warrant to purchase 65,934 shares of our Series 1 Preferred Stock into a warrant to purchase 65,934 shares of our common stock upon the completion of this offering; and
- on a pro forma as adjusted basis to additionally reflect the issuance and sale by us of \_\_\_\_\_ shares of our common stock in this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, at an assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus.

Our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of the offering determined at pricing. You should read this information together with our audited financial statements and related notes appearing elsewhere in this prospectus and the information set forth under the “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections.

(in thousands, except share and per share data)	As of December 31, 2016		
	Actual	Pro forma	Pro forma as adjusted(1)
Cash and cash equivalents	\$ 47,305	\$ 47,305	\$
Warrant liability	167	—	—
Series C Preferred Stock, \$0.0001 par value: 17,000,000 shares authorized, actual, 16,828,217 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	51,424	—	—
Series B Preferred Stock, \$0.0001 par value: 23,000,000 shares authorized, actual, 22,928,234 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	40,355	—	—
Series A Preferred Stock, \$0.0001 par value: 14,996,692 shares authorized, actual, 14,996,692 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	14,431	—	—
Series 1 Preferred Stock, \$0.0001 par value: 2,112,025 shares authorized, actual, 2,046,091 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	1,370	—	—
Common stock, \$0.0001 par value: 73,000,000 shares authorized, actual, 4,514,873 shares issued and 4,434,873 shares outstanding, actual; 73,000,000 shares authorized, pro forma; 61,314,107 shares issued and 61,234,107 shares outstanding, pro forma; _____ shares authorized, pro forma as adjusted; _____ shares issued and outstanding, pro forma as adjusted;	0	6	—
Treasury stock	(8)	(8)	—
Additional paid-in capital	0	107,741	—
Accumulated deficit	(64,986)	(64,986)	—
Total stockholders’ (deficit) equity	(64,994)	42,753	—
Total capitalization	\$ 42,753	\$ 42,753	\$

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- (1) The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. A \$1.00 increase (decrease) in the assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the amount of cash and cash equivalents, additional paid-in capital, total stockholders' (deficit) equity and total capitalization on a pro forma as adjusted basis by approximately \$ \_\_\_\_\_ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares offered by us would increase (decrease) cash and cash equivalents, total stockholders' equity (deficit) and total capitalization on a pro forma as adjusted basis by approximately \$ \_\_\_\_\_ million, assuming the assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock to be outstanding after this offering excludes the following:

- 11,070,314 shares of common stock issuable upon the exercise of outstanding stock options as of December 31, 2016, having a weighted-average exercise price of \$0.71 per share;
- 126,334 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2016, having a weighted-average exercise price of \$0.25 per share; and
- 530,600 shares of common stock reserved for issuance pursuant to future awards under our 2011 Equity Incentive Plan; and
- \_\_\_\_\_ shares of common stock reserved for issuance pursuant to future awards under our 2017 Employee, Director and Consultant Equity Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective upon the closing of this offering.



## Dilution

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

As of December 31, 2016, our historical net tangible book value was \$(65.0) million, or \$(14.49) per share of common stock. Our historical net tangible book value per share is equal to our total tangible assets, less total liabilities and preferred stock, divided by the number of outstanding shares of our common stock. As of December 31, 2016, the pro forma net tangible book value of our common stock was \$42.8 million, or \$0.70 per share of common stock, taking into account the expected conversion of our outstanding preferred stock into common stock prior to the completion of this offering. After giving further effect to the sale of \_\_\_\_\_ shares of common stock in this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, at an assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus, our pro forma as adjusted net tangible book value as of December 31, 2016, would have been approximately \$ \_\_\_\_\_ million, or approximately \$ \_\_\_\_\_ per share of common stock. This represents an immediate increase in pro forma as adjusted net tangible book value of \$ \_\_\_\_\_ per share to our existing stockholders and an immediate dilution of \$ \_\_\_\_\_ per share to investors participating in this offering. The following table illustrates this per share dilution:

The following table illustrates this per share dilution:

Assumed initial public offering price per share of our common stock		\$
Historical net tangible book value per share of our common stock as of December 31, 2016, before giving effect to this offering	\$(14.49)	
Increase attributable to the conversion of outstanding preferred stock	\$ 15.19	
Pro forma net tangible book value per share as of December 31, 2016, before giving effect to this offering	\$ 0.70	
Increase in net tangible book value per share attributable to new investors		
Pro forma as adjusted net tangible book value per share of our common stock after giving effect to this offering		
Dilution per share of common stock to new investors participating in this offering		\$

The information discussed above is illustrative only, and the dilution information following this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. A \$1.00 increase (decrease) in the assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value by \$ \_\_\_\_\_ per share and the dilution to new investors by \$ \_\_\_\_\_ per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 shares offered by us would increase the pro forma as adjusted net tangible book value by \$ \_\_\_\_\_ per share and decrease the dilution to new investors by \$ \_\_\_\_\_ per share, assuming the assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. Similarly, a decrease of 1,000,000 shares offered by us would decrease the pro forma as adjusted net tangible book value by \$ \_\_\_\_\_ per share and increase the dilution to new investors by \$ \_\_\_\_\_ per share, assuming the assumed initial public offering price of \$ \_\_\_\_\_ per share.

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per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us.

If the underwriters exercise their option to purchase additional shares in full, the pro forma as adjusted net tangible book value as of December 31, 2016, will increase to \$ million, or \$ per share, representing an increase to existing stockholders of \$ per share, and there will be an immediate dilution of \$ per share to new investors.

The following table summarizes as of December 31, 2016, on the pro forma as adjusted basis as described above, the differences between the number of shares of common stock purchased from us, the total consideration and the average price per share paid by existing stockholders (giving effect to the conversion of all of our preferred stock into 56,799,234 shares of common stock prior to the completion of this offering) and by investors participating in this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses, at an assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus.

	Shares purchased		Total consideration		Average price/share
	Number	Percent	Amount	Percent	
Existing shareholders		%	\$	%	\$
Investors participating in this offering		%	\$	%	\$
Total		100%	\$	100%	\$

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by \$ , and increase (decrease) the percentage of total consideration paid by new investors by approximately %, assuming that the number of shares offered by us, as listed on the cover page of this prospectus, remains the same. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) the total consideration paid by new investors by \$ million and increase (decrease) the percentage of total consideration paid by new investors by approximately % assuming that the assumed initial public offering price of \$ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, price remains the same.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to % of the total number of shares of our common stock outstanding after this offering.

The number of shares of common stock to be outstanding after this offering is based on 61,234,107 shares of common stock outstanding as of December 31, 2016, and excludes the following:

- 11,070,314 shares of common stock issuable upon the exercise of outstanding stock options as of December 31, 2016, having a weighted-average exercise price of \$0.71 per share;
- 126,334 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2016, having a weighted-average exercise price of \$0.25 per share;

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- 530,600 shares of common stock reserved for issuance pursuant to future awards under our 2011 Equity Incentive Plan; and
- \_\_\_\_\_ shares of common stock reserved for issuance pursuant to future awards under our 2017 Employee, Director and Consultant Equity Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective upon the closing of this offering.

To the extent that any options or warrants are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of such securities could result in further dilution to our stockholders.

## Selected financial data

You should read the following selected financial data together with our financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this prospectus. We have derived the statement of operations data for the years ended December 31, 2015 and 2016, and the balance sheet data as of December 31, 2015 and 2016, from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that should be expected in the future.

	Year ended December 31,	
	2015	2016
<b>Statements of Operations Data:</b>		
Grant revenue	\$ 522,431	\$ —
Operating expenses:		
Research and development	12,730,335	25,161,300
General and administrative	3,215,803	5,229,640
Total operating expenses	15,946,138	30,390,940
Operating loss	(15,423,707)	(30,390,940)
Other income (expenses):		
Other income	17,781	182,372
Change in fair value of warrant liability	(84,998)	(82,231)
Change in fair value of Series B purchase option liability	(4,772,509)	—
Total other income (expense), net	(4,839,726)	100,141
Net loss and comprehensive loss	(20,263,433)	(30,290,799)
Accretion of redeemable convertible preferred stock(1)	(1,426,740)	(4,405,007)
Net loss attributable to common stockholders	\$ (21,690,173)	\$ (34,695,806)
Basic and diluted net loss per share(2)	\$ (5.38)	\$ (7.78)
Weighted average shares outstanding, basic and diluted(2)	4,033,722	4,460,986
Pro forma basic and diluted net loss per share (unaudited)(2)		\$ (0.54)
Pro forma weighted-average basic and diluted shares outstanding (unaudited)(2)		55,647,597

	As of December 31,	
	2015	2016
<b>Balance Sheet Data:</b>		
Cash, cash equivalents and short term investments	\$ 22,937,720	\$ 47,304,820
Working capital(3)	21,582,367	42,275,736
Total assets	23,896,625	48,211,921
Redeemable convertible preferred stock	53,424,060	107,580,149
Total stockholders’ (deficit) equity	(31,694,808)	(64,993,540)

(1) See Note 7 to our financial statements appearing elsewhere in this prospectus for further details on the calculation of accretion of redeemable convertible preferred stock.

(2) See Note 9 to our financial statements appearing elsewhere in this prospectus for further details on the calculation of basic and diluted net loss per share and pro forma basic and diluted net loss per share applicable to common stockholders.

(3) We define working capital as current assets less current liabilities.

## Management's discussion and analysis of financial condition and results of operations

*You should read the following discussion and analysis of our financial condition and results of operations together with the "Selected Financial Data" section and our financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.*

### Overview

We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel therapeutics for the treatment of cancer. Our two clinical assets are based on our core understanding of cyclin-dependent kinases, or CDKs, a family of proteins that play an important role in the growth and proliferation of all human cells. Two particular CDKs, CDK4 and CDK6, collectively known as CDK4/6, represent a validated and promising class of targets for anti-cancer therapeutics. We have leveraged our deep expertise in CDK4/6 biology to discover and develop two highly potent and selective CDK4/6 inhibitors that may have broad applicability across multiple cancer indications. We believe we are the only company with two distinct clinical-stage CDK4/6 inhibitors, trilaciclib and G1T38, each of which has the potential to be the backbone therapy of multiple combination regimens.

CDK4/6 is required for growth and proliferation in certain normal cell types, such as hematopoietic stem and progenitor cells, or HSPCs. HSPCs reside in the bone marrow and are the "reservoir" from which all blood and immune system cells are formed. Additionally, CDK4/6 plays an integral role in the growth and proliferation of certain types of tumors. Tumors that rely on CDK4/6 to grow and proliferate are referred to as CDK4/6-dependent tumors, and include the most common kinds of prostate and breast cancer. Alternatively, some tumors can grow and proliferate without CDK4/6 activity and are referred to as CDK4/6-independent. CDK4/6 independent tumors include small cell lung cancer, or SCLC, and triple-negative breast cancer, or TNBC. Our two CDK4/6 inhibitors were rationally designed to treat distinct patient populations with different combination regimens. Trilaciclib is in development in combination with chemotherapy for the treatment of patients with CDK4/6-independent tumors. G1T38 is in development in combination with targeted therapies for the treatment of patients with CDK4/6-dependent tumors.

Trilaciclib, our most advanced candidate, is a potential first-in-class intravenous CDK4/6 inhibitor we rationally designed to preserve HSPCs and enhance immune system function during chemotherapy. Chemotherapy has significant clinical utility and continues to be the most effective treatment for many cancers. However, it also damages HSPCs (myelosuppression) and the immune system (immunosuppression), leading to severe adverse effects and limiting anti-tumor activity. We believe that if the beneficial effects of chemotherapy (i.e. potent tumor cell killing) could be maximized, while minimizing the deleterious side-effects of myelosuppression and immunosuppression, patient outcomes would be significantly improved.

Based on compelling response rates and favorable tolerability shown in early-stage trials, trilaciclib is currently being evaluated in three randomized trials: two Phase 1b/2a trials in patients with SCLC, and one Phase 2 trial in patients with TNBC. We have completed the Phase 1b parts of the two SCLC trials, and initial data from the ongoing randomized placebo-controlled Phase 2a parts of these trials are expected to be released in 2018. Initial data from the TNBC trial is also expected to be released in 2018.

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G1T38, our second clinical-stage candidate, is a potential best-in-class oral CDK4/6 inhibitor being developed to be used in combination with other targeted therapies to treat multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor Ibrance and others in development. Our preclinical data and early clinical data indicate the potential for continuous daily dosing and improved antitumor activity and tolerability. A Phase 1 trial of G1T38 in 75 healthy volunteers showed a favorable safety profile leading to the initiation of a Phase 1/2 trial in ER+, HER2- breast cancer (in combination with Faslodex) in January 2017. Our plans for G1T38 include combinations in other cancers, such as non-small cell lung cancer, or NSCLC, where we expect to begin a Phase 2 trial in 2018 in combination with an EGFR inhibitor.

As part of our strategy to develop wholly owned proprietary combinations that complement our CDK4/6 portfolio, we have exclusively in-licensed G1T48, a potential first/best-in-class oral selective estrogen receptor degrader, or SERD. We expect to initially develop G1T48 to be used in combination with G1T38 for the treatment of ER+, HER2- breast cancer. Based on compelling preclinical efficacy and safety data, we expect to file an investigational new drug application, or IND, or clinical trial authorization application, or CTA, for G1T48 in the fourth quarter of 2017. We plan to continue to leverage our proprietary assets and knowledge of CDK4/6 biology to explore additional combination treatments and to build a fully integrated oncology company.

Since our inception in 2008, we have devoted substantially all of our resources to synthesizing, acquiring, testing and developing our product candidates, including conducting preclinical studies and clinical trials and providing general and administrative support for these operations as well as securing intellectual property protection for our product candidates. We do not have any products approved for sale and have not generated any revenues from product sales. We recorded \$0.5 million and \$0 million of revenue from government grants for the years ended December 31, 2015 and December 31, 2016, respectively. We do not expect to receive government grants in the foreseeable future. To date, we have financed our operations primarily through private placements of convertible debt and equity securities.

As of December 31, 2016, we had cash and cash equivalents of \$47.3 million. Since inception, we have incurred net losses. Our net losses were \$20.3 million and \$30.3 million for the years ended December 31, 2015, and December 31, 2016, respectively. As of December 31, 2016, we had an accumulated deficit of \$65.0 million. Substantially all of our net losses have resulted from costs incurred in connection with our research and development programs and from general and administrative expenses associated with our operations. We expect to continue to incur significant expenses and increasing operating losses over at least the foreseeable future. We expect our expenses will increase substantially in connection with our ongoing activities as we:

- continue development of our product candidates, including initiating additional clinical trials of trilaciclib and G1T38 and completing preclinical studies and potentially initiating clinical trials of our preclinical-stage product candidate, G1T48;
- identify and develop new product candidates;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- achieve market acceptance of our product candidates in the medical community and with third-party payors;
- maintain, expand and protect our intellectual property portfolio;
- hire additional personnel;
- enter into collaboration arrangements, if any, for the development of our product candidates or in-license other products and technologies;

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- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur increased costs as a result of operating as a public company.

As further discussed in our audited financial statements and related footnotes appearing elsewhere in this prospectus, these matters raise substantial doubt about our ability to continue as a going concern.

### **License agreement with the University of Illinois**

In November 2016, we entered into a license agreement with the University of Illinois, or UIC, pursuant to which we obtained an exclusive, worldwide license to make, have made, use, import, sell and offer for sale SERDs, including G1T48, covered by certain patent rights owned UIC. The rights licensed to us are for all fields of use. Under the terms of the agreement we paid a one-time only, non-refundable upfront fee of \$500,000, and are required to pay UIC low single-digit royalties on all net sales of products and a share of any sublicensing revenues. We are also obligated to pay annual maintenance fees, which are fully creditable against any royalty payments made by us. We may also be required to pay UIC milestone payments of up to an aggregate of \$2.625 million related to the initiation and execution of clinical trials and first commercial sale of a product in multiple countries. We are responsible for all future patent prosecution costs. See "Business—Intellectual Property—Exclusive License for G1T48."

### **Financial operations overview**

#### ***Revenues***

To date, we have not generated any revenues from the commercial sale of approved products or out-licensing of our product candidates, and we do not expect to generate substantial revenue from the commercial sale of our products for at least the foreseeable future, if ever. In the future, we will seek to generate revenue primarily from product sales and, potentially, regional or global collaborations with strategic partners. We have received all of our revenues to date from government grants related to our research.

#### ***Operating expenses***

We classify our operating expenses into two categories: research and development and general and administrative expenses. Personnel costs, including salaries, benefits, bonuses and stock-based compensation expense, comprise a significant component of each of these expense categories. We allocate expenses associated with personnel costs based on the nature of work associated with these resources.

#### ***Research and Development Expenses***

The largest component of our total operating expenses since inception has been research and development activities, including the preclinical and clinical development of our product candidates.

Research and development costs are expensed as incurred. Our research and development expense primarily consists of:

- salaries and personnel-related costs, including bonuses, benefits and any stock-based compensation, for our scientific personnel performing or managing out-sourced research and development activities;
- costs incurred under agreements with contract research organizations and investigative sites that conduct preclinical studies and clinical trials;

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- costs related to manufacturing pharmaceutical active ingredients and drug products for preclinical studies and clinical trials;
- costs related to upfront and milestone payments under in-licensing agreements;
- fees paid to consultants and other third parties who support our product candidate development;
- other costs incurred in seeking regulatory approval of our product candidates; and
- allocated facility-related costs and overhead.

The successful development of our product candidates is highly uncertain. 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. Accordingly, we expect research and development costs to increase significantly for the foreseeable future as programs progress. However, we do not believe that it is possible at this time to accurately project total program-specific expenses through commercialization. We are also unable to predict when, if ever, material net cash inflows will commence from our product candidates to offset these expenses. Our expenditures on current and future preclinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors including:

- the scope, rate of progress, and expenses of our ongoing as well as any additional clinical trials and other research and development activities;
- future clinical trial results;
- achievement of milestones requiring payments under our in-licensing agreements;
- uncertainties in clinical trial enrollment rates or drop-out or discontinuation rates of patients;
- potential additional studies requested by regulatory agencies;
- significant and changing government regulation; and
- the timing and receipt of any regulatory approvals.

We track research and development expenses on a program-by-program basis only for clinical-stage product candidates. Preclinical research and development expenses and chemical manufacturing research and development expenses are not assigned or allocated to individual development programs. In 2015, trilaciclib was our only clinical-stage product candidate. In 2016, we had two clinical-stage product candidates, trilaciclib and G1T38.

### *General and administrative expenses*

General and administrative expenses consist of personnel costs, allocated expenses and other expenses for outside professional services, including legal, audit and accounting services. Personnel costs consist of salaries, bonuses, benefits and stock-based compensation. Other general and administrative expenses include facility-related costs not otherwise allocated to research and development expense, professional fees, expenses associated with obtaining and maintaining patents and costs of our information systems. We anticipate that our general and administrative expenses will continue to increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates.



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We also expect to incur additional expenses as a public company, including expenses related to compliance with the rules and regulations of the SEC and NASDAQ, additional insurance expenses, and expenses related to investor relations activities and other administration and professional services.

### ***Total other income (expense), net***

Total other income (expense), net consists of interest income earned on cash and cash equivalents and the change in fair value of warrant liabilities and other liabilities.

### ***Income taxes***

To date, we have not been required to pay U.S. federal or state income taxes because we have not generated taxable income.

## **Critical accounting policies and significant judgments and estimates**

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in the notes to our financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies are critical to the process of making significant judgments and estimates in the preparation of our financial statements and understanding and evaluating our reported financial results.

### ***Accrued research and development expenses***

As part of the process of preparing our financial statements, we are required to estimate and accrue expenses, the largest of which is related to accrued research and development expenses. This process for estimating and accruing expenses involves reviewing contracts and purchase orders, identifying 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 the actual costs.

Costs for preclinical study and clinical trial activities are recognized based on an evaluation of our vendors' progress towards completion of specific tasks, using data such as patient enrollment, clinical site activations or information provided to us by our vendors regarding their actual costs incurred. Payments for these activities are based on the terms of individual contracts and payment timing may differ significantly from the period in which the services were performed. We determine accrual estimates through reports from and discussions with applicable personnel and outside service providers as to the progress or state of completion of trials, or the services completed. Our estimates of accrued expenses as of each balance sheet date are based on the facts and circumstances known at the time.

Although we do not expect our estimates to be materially different from the amounts actually incurred, if our estimates of the status and timing of the services performed differ from the actual status and timing of services performed, we may report amounts that are too high or too low in any particular period. To date, there have been no material differences from our estimates to the amount actually incurred.

**Warrant liability**

Warrants to purchase our preferred stock are classified as liabilities and are recorded at their estimated fair value. In each reporting period, any change in fair value of the warrants is recorded as expense in the case of an increase in fair value and income in the case of a decrease in fair value. We used significant assumptions in estimating the fair value of our warrant liability including the estimated volatility, risk free interest rate, estimated fair value of our redeemable convertible preferred shares and the estimated life of the warrant. These assumptions were used in our option pricing method and the probability weighted expected return method, a blend of which were considered in establishing fair value.

**Series B purchase option liability**

The option to purchase shares of Series B redeemable convertible preferred stock in a second tranche has been accounted for as a free-standing instrument and classified as a liability. On February 4, 2015, upon purchase of the first tranche of Series B Preferred Stock, the option to purchase additional shares was recorded at its fair value, with the remaining cash proceeds received on that date allocated to Series B Preferred Stock. As the value of the option to purchase shares in the second tranche increased over time, a change in the fair value of the liability was recorded as "Change in fair value of Series B purchase option liability" in the accompanying statement of operations. This free-standing instrument was exercised on December 10, 2015 when the right to require the purchase of the second tranche shares by the holders of the outstanding shares of Series B Preferred Stock was exercised, resulting in an outstanding liability of zero on December 31, 2015.

**Stock-based compensation**

We account for stock-based compensation awards in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718, *Compensation—Stock Compensation*, or ASC 718. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. Our stock-based compensation awards have historically consisted of stock options.

We recognize compensation costs related to stock options granted to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards.

We recognize compensation costs related to stock options granted to non-employees based on the estimated fair value of the awards on the date of grant in the same manner as we do options for employees; however, the fair value of the stock options granted to non-employees is re-measured each reporting period until the service is complete, and the resulting increase or decrease in value, if any, is recognized as expense or income, respectively, during the period the related services are rendered.

We calculate the fair value of stock options using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of subjective assumptions, including the expected volatility of our common stock, the assumed dividend yield, the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options, and the fair value of the underlying common stock on the date of grant. In applying these assumptions, we considered the following factors:

- we do not have sufficient history to estimate the volatility of our common stock; we calculate expected volatility based on reported data for selected similar publicly traded companies for which the historical

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information is available; we plan to continue to use the guideline peer group volatility information until the historical volatility of our common stock is sufficient to measure expected volatility for future option grants;

- the assumed dividend yield of zero is based on our expectation of not paying dividends for the foreseeable future;
- our estimates of expected term used in the Black-Scholes option-pricing model were based on the estimated time from the grant date to the date of exercise;
- we determine the risk-free interest rate by reference to implied yields available from U.S. Treasury securities with a remaining term equal to the expected life assumed at the date of grant; and
- we estimate forfeitures based on our historical analysis of actual stock option forfeitures. To date, we have had minimal forfeitures, accordingly, we have assumed no forfeiture rate.

The following summarizes the assumptions we used to estimate the fair value of stock options that we granted to employees and non-employees for the periods indicated:

	Employees		Non-employees	
	year ended December 31,		year ended December 31,	
	2015	2016	2015	2016
Expected volatility	66.8—69.3%	74.8—78.8%	66.8—69.3%	75.3—83.9%
Weighted-average risk free rate	1.50—1.71%	1.28—2.08%	1.50—1.71%	1.21—1.80%
Dividend yield	0%	0%	0%	0%
Expected Term (in years)	6.25	6.07	10	9.01

For the years ended December 31, 2015 and 2016, share-based compensation expense was \$388,835 and \$1,390,555, respectively. Share-based compensation expense for 2015 was comprised of \$179,792 and \$209,043 for employees and non-employees, respectively. This expense reflects the reassessment of the fair value of stock options granted throughout 2015 in light of our proposed initial public offering. Share-based compensation expense for 2016 was comprised of \$907,135 and \$483,420 for employees and non-employees, respectively. As of December 31, 2016, we had \$5,074,934 of total unrecognized share-based compensation costs, net of estimated forfeitures, which we expect to recognize over a weighted-average period of 2.81 years.

**Stock option award grants**

The following table summarizes by grant date the number of shares of our common stock subject to stock option and stock warrants granted during the years ended December 31, 2015 and 2016, as well as the associated per-share exercise price of the award, the estimated fair value per share of our common stock on the grant date, and the reassessment of the estimated fair value per share of the award.

Grant date	Number of shares underlying option granted	Exercise price per share	Estimated FV per share of common stock at grant date	Reassessed FV per share of common stock
February 27, 2015	2,625,000	\$ 0.10	\$ 0.10	\$ 0.25
July 15, 2015	80,000	\$ 0.10	\$ 0.10	\$ 0.80
September 7, 2015	150,000	\$ 0.10	\$ 0.10	\$ 0.91
December 21, 2015	1,966,400	\$ 1.24	\$ 1.24	\$ 1.24
May 10, 2016	2,668,000	\$ 1.39	\$ 1.39	\$ 1.39
July 15, 2016	195,000	\$ 1.39	\$ 1.39	\$ 1.39
September 22, 2016	205,000	\$ 1.39	\$ 1.39	\$ 1.39
December 1, 2016	230,000	\$ 2.29	\$ 2.29	\$ 2.29

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Prior to this offering, the fair value of our common shares underlying our stock options was estimated on each grant date by our board of directors. In order to determine the fair value of our common shares underlying granted stock options, our board of directors considered, among other things, timely valuations of our common shares prepared by an unrelated third-party valuation firm in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation.

Given the absence of a public trading market for our common shares, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common shares, including (1) our business, financial condition and results of operations, including related industry trends affecting our operations; (2) our forecasted operating performance and projected future cash flows; (3) the illiquid nature of our common shares; (4) liquidation preferences and other rights and privileges of our common shares; (5) market multiples of our most comparable public peers and (6) market conditions affecting our industry.

In connection with our 2015 audit, we reassessed the determination of the fair value of the common shares underlying 4,821,400 stock options granted throughout 2015. As a result, we determined that the fair value of the common shares in 2015 increased from \$0.10 per common share at January 31, 2015 to \$1.24 per common share at December 31, 2015, which was higher than the fair value per share as initially determined by the board of directors on the respective grant dates of February 27, 2015, July 15, 2015 and September 7, 2015. The use of this higher share price increased both recognized and unrecognized share-based compensation expense.

In connection with our proposed initial public offering and after preliminary discussions with our underwriters, we reassessed the determination of the fair value of the common shares underlying the 3,298,000 stock options granted throughout 2016 and determined that no adjustment was necessary.

After the closing of the offering contemplated hereby, our board of directors will determine the fair value of each common share underlying share-based awards based on the closing price of our common shares as reported by the NASDAQ on the date of grant.

Based on an assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover page of this prospectus, the intrinsic value of stock options outstanding at December 31, 2016 was \$ \_\_\_\_\_ million, with \$ \_\_\_\_\_ million related to vested options and \$ \_\_\_\_\_ million related to unvested options.

The table below summarizes the stock-based compensation expense recognized in our statements of operation by classification:

	Year ended December 31,	
	2015	2016
	(in thousands)	
Research and development	\$ 221	\$ 911
General and administrative	\$ 168	\$ 480

## **Income taxes**

We recognize deferred income taxes for temporary differences between the basis of assets and liabilities for financial statement and income tax purposes. We periodically evaluate the positive and negative evidence bearing upon the ability to realize our deferred tax assets. Based upon the weight of the available evidence, which includes historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting our future results, we maintained a full valuation allowance on the net deferred tax assets for all

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periods presented. We intend to maintain a full valuation allowance on the U.S. deferred tax assets for the foreseeable future until sufficient positive evidence exists to support reversal of the valuation allowance.

As of December 31, 2016, we had federal and state operating loss carryforwards of approximately \$46.8 million, available to reduce future taxable income that will begin to expire in 2028. As of December 31, 2016, we also had research and development tax credit carryforwards of approximately \$1.5 million for federal purposes available to offset future income tax. If not utilized, the federal carryforwards will expire in various amounts beginning in 2034.

Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by Section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. An analysis to determine the limitation of the net operating loss carryforwards has not been performed.

## Results of operations

### *Comparison of the year ended December 31, 2016 and December 31, 2015*

	Years ended December 31,		Change \$
	2015	2016	
	(in thousands)		
Grant Revenue	\$ 522	\$ —	\$ (522)
Operating Expenses:			
Research and Development	12,730	25,161	12,431
General and Administrative	3,216	5,230	2,014
Total Operating Expenses	15,946	30,391	14,445
Loss from Operations	(15,424)	(30,391)	(14,967)
Other Income (expenses)	(4,840)	100	4,940
Net Loss	\$ (20,264)	\$ (30,291)	\$ (10,027)

### *Revenue*

Revenue was \$0 for the year ended December 31, 2016 as compared to \$0.5 million for the year ended December 31, 2015. The decrease of \$0.5 million was due to the expiration of existing government grants in 2015. We have not applied for new government grants and do not expect any additional grant revenue in the near future.

### *Research and development*

Research and development expenses were \$25.2 million for the year ended December 31, 2016 as compared to \$12.7 million for the year ended December 31, 2015. The increase of \$12.4 million, or 98%, was due to an increase of \$10.3 million in our clinical program costs, which included increased costs of \$6.2 million due to our ongoing Phase 1b/2a clinical trials of trilaciclib in SCLC and initiation costs for the Phase 2 clinical trial of trilaciclib in TNBC, an increase of \$2.5 million in connection with the completion of a Phase 1 trial for G1T38 in healthy normal volunteers and preparation for a Phase 1/2 clinical trial in ER+, HER2- breast cancer and \$1.6 million in increased personnel costs and other costs related to the trilaciclib and G1T38 clinical programs. The increase in overall research and development expenses also includes an increase of \$2.0 million in

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connection with manufacturing of pharmaceutical active ingredient and drug product to support our clinical trials, an increase of \$0.9 million in preclinical and drug development personnel-related costs as a result of increased headcount and fees paid to consultants, an increase of \$0.4 million in license fees and an increase of \$0.2 million in supplies and facility costs, offset in part by a decrease of \$1.4 million in external costs related to the selection of compounds for development and preclinical development of G1T38 and G1T48. The following table summarizes our research and development expenses allocated to trilaciclib and G1T38 and unallocated research and development expenses for the periods indicated:

	Year ended December 31,	
	2015	2016
	(in thousands)	
Clinical Expenses—trilaciclib	\$ 4,889	\$11,693
Clinical Expenses—G1T38	—	3,504
Chemical Manufacturing and Development	2,688	4,967
Discovery and Pre-Clinical Expenses	5,153	4,997
Total Research and Development Expenses	\$12,730	\$25,161

### *General and administrative*

General and administrative expenses were \$5.2 million for the year ended December 31, 2016 as compared to \$3.2 million for the year ended December 31, 2015. The increase of \$2.0 million, or 63%, was due to an increase of \$1.0 million of transaction related costs from our deferred initial public offering, an increase of \$0.6 million in personnel costs as a result of increased headcount and fees paid to consultants and an increase of \$0.4 million in general and intellectual property legal expenses.

### **Total other income (expense), net**

Total other income (expense), net was \$0.1 million for the year ended December 31, 2016 as compared to \$(4.8) million for the year ended December 31, 2015. The decrease in expense of \$4.9 million was due to the change in fair value of the Series B purchase option liability in 2015 and no equivalent expense in 2016, the change in the fair value of the warrant liability and an increase in interest income.

### **Liquidity and capital resources**

We have incurred cumulative losses and negative cash flows from operations since our inception in 2008. As of December 31, 2016, we had an accumulated deficit of \$65.0 million. We do not expect to generate substantial revenue from the commercial sale of our products and anticipate that we will continue to incur losses for the foreseeable future.

To date, we have financed our operations primarily through private placements of convertible debt and equity securities. In October 2013, we issued 7,509,696 shares of our Series A Preferred Stock for total proceeds of \$6.3 million, including cash proceeds of \$5.0 million and cancellation of approximately \$1.3 million in debt. In May 2014, we issued an additional 7,486,996 shares of our Series A Preferred Stock for total gross proceeds of \$6.3 million. In February 2015, we issued 11,382,087 shares of our Series B Preferred Stock for total proceeds of \$16.5 million, including cash proceeds of \$16.5 million and cancellation of approximately \$12,000 in debt. In December 2015, we issued an additional 11,546,147 shares of our Series B Preferred Stock for total gross proceeds of \$16.7 million. In the second quarter of 2016, we issued 16,828,217 shares of our Series C Preferred Stock for total gross proceeds of \$50.0 million.

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As of December 31, 2016, we had cash and cash equivalents of \$47.3 million. We believe that the net proceeds from the offering contemplated hereby and our existing cash and cash equivalents will be sufficient to fund our projected cash needs for at least the next 24 months. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may raise through a combination of equity offerings, debt financings, other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. We may also need to raise additional funds sooner to pursue other development activities related to additional product candidates. Our recurring loss from operations and negative cash flows raise substantial doubt about our ability to continue as a going concern. We may never become profitable, or if we do, we may not be able to sustain profitability on a recurring basis.

### **Cash flows**

The following table summarizes our cash flows for the periods indicated:

	Years ended December 31,		Change \$
	2015	2016	
	(in thousands)		
Net cash used in operating activities	\$ (13,845)	\$ (25,141)	\$ (11,296)
Net cash used in investing activities	(87)	(250)	(163)
Net cash provided by financing activities	33,176	49,758	16,582
Net increase in cash and cash equivalents	\$ 19,244	\$ 24,367	\$ 5,123

#### *Net cash used in operating activities*

Net cash used in operating activities increased \$11.3 million, from \$13.8 million for the year ended December 31, 2015 to \$25.1 million for the year ended December 31, 2016. The increase in net cash used in operating activities as compared to the prior year period is mainly due to the increase in net loss. The primary drivers of operating cash requirements were our research and development and general and administrative activities in each period. During the year ended December 31, 2015, we used net cash in operating activities of \$13.8 million, which consisted primarily of our net loss of \$20.3 million partially offset by \$4.8 million due to the increase in fair value of the Series B purchase option liability and a change in accrued expenses and accounts payable of \$1.7 million, related primarily to an increase in research and development activity during that period. During the year ended December 31, 2016, we used net cash in operating activities of \$25.1 million, which consisted primarily of our net loss of \$30.3 million partially offset by a change in accrued expenses and accounts payable of \$3.4 million, related primarily to an increase in research and development activity during that period, non-cash stock-based compensation charges of \$1.4 million, and \$0.4 million of other working capital adjustments.

#### *Net cash used in investing activities*

Net cash used in investing activities increased \$0.2 million from \$0.1 million for the year ended December 31, 2015 to \$0.3 million for the year ended December 31, 2016. The increase was due to increased purchases of property and equipment.

#### *Net cash provided by financing activities*

Net cash provided by financing activities increased \$16.6 million from \$33.2 million for the year ended December 31, 2015 to \$49.8 million for the year ended December 31, 2016. For the year ended December 31,

2015, we issued shares of our Series B Preferred Stock which resulted in \$33.3 million in gross proceeds which was offset in part by financing costs of \$0.1 million. During the year ended December 31, 2016, we issued shares of our Series C Preferred Stock which resulted in \$50.0 million in gross proceeds which was offset in part by financing costs of \$0.2 million.

### ***Operating capital requirements and plan of operations***

To date, we have not generated any revenue from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one of our current or future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of and seek regulatory approvals for our product candidates, and begin to commercialize any approved products. We are subject to all of the risks inherent in the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. Upon the closing of this offering, we expect to incur additional costs associated with operating as a public company and we anticipate that we will need substantial additional funding in connection with our continuing operations.

We believe that the net proceeds from this offering and our existing cash and cash equivalents will be sufficient to fund our projected cash needs for at least the next 24 months. In order to complete the process of obtaining regulatory approval for our product candidates and to build the sales, marketing and distribution infrastructure that we believe will be necessary to commercialize our product candidates, if approved, we will require substantial additional funding.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all of our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, progress, results and costs of nonclinical development, laboratory testing and clinical trials for our product candidates;
- the scope, prioritization and number of our research and development programs;
- the costs, timing and outcome of regulatory review of our product candidates;
- the extent to which we enter into non-exclusive, jointly funded clinical research collaboration arrangements, if any, for the development of our product candidates in combination with other companies' products;
- our ability to establish such collaborative co-development arrangements on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under our license agreement and any collaboration agreements into which we enter;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under future collaboration agreements, if any;
- the extent to which we acquire or in-license product candidates and technologies, such as G1T48, and the terms of such in-licenses;
- the costs of future commercialization activities, including product sales, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;



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- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval; and
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims.

Until such time, if ever, as we can generate substantial revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

## Contractual obligations, commitments and contingencies

Our principal commitments consist of obligations under our clinical trial commitments, consulting fees and operating lease commitments. The following table summarizes these contractual obligations as of December 31, 2016:

	Payments due by period				
	Less than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
	(in thousands)				
Contractual Obligations:					
Operating lease obligations(1)	\$ 173	\$ 413	\$ 439	\$ 229	\$1,254
Total contractual obligations(2)	\$ 173	\$ 413	\$ 439	\$ 229	\$1,254

(1) Represents future minimum lease payments under the non-cancelable lease for our headquarters in Research Triangle Park, NC. The minimum lease payments above do not include any related common area maintenance charges or real estate taxes.

(2) We enter into agreements in the normal course of business with contract research organizations for clinical trials and with vendors for preclinical studies and other services and products for operating purposes which are cancelable at any time by us, generally upon 30-60 days prior written notice. The contractual obligations above do not include such payments.

The above amounts exclude potential payments to be made under our license agreement for G1T48 with the University of Illinois that are based on the progress of G1T48, as these payments are not determinable.

## Off-Balance sheet arrangements

We did not have, during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under applicable SEC rules.

## Quantitative and qualitative disclosures about market risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. We had cash and cash equivalents of \$22.9 million and \$47.3 million as of December 31, 2015

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and December 31, 2016, respectively, which consist of deposits in banks, including checking accounts, money market accounts and certificates of deposit. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant. We had no outstanding debt as of December 31, 2015 and December 31, 2016.

### **JOBES Act: emerging growth company status**

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, or JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected to not take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards and, as a result, will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies.

For so long as we are an emerging growth company we expect that:

- we will present no more than two years of audited financial statements and no more than two years of related management's discussion and analysis of financial condition and results of operations in our initial registration statement;
- we will avail ourselves of the exemption from the requirement to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- we will avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act; and
- we will provide less extensive disclosure about our executive compensation arrangements.

We will remain an emerging growth company for up to five years, although we will cease to be an “emerging growth company” upon the earliest of: (1) the last day of the fiscal year following the fifth anniversary of this offering, (2) the last day of the first fiscal year in which our annual revenues are \$1 billion or more, (3) the date on which we have, during the previous rolling three-year period, issued more than \$1 billion in non-convertible debt securities, and (4) the date on which we are deemed to be a “large accelerated filer” as defined in the Exchange Act.

### **Recently issued accounting pronouncements**

In October 2016, the FASB issued ASU No. 2016-17, *Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control*, which amends the consolidation guidance on how a reporting entity that is a single decision maker of a variable interest entity should treat indirect interest in the entity held through related parties that are under common control. This guidance is effective for annual periods beginning after December 15, 2016, including interim periods within those annual periods, with early adoption permitted. We are currently evaluating the impact of the adoption of this ASU on our financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. The FASB issued ASU 2016-09 to improve U.S. GAAP by providing guidance on the cash flow statement classification of eight specific areas where there is existing diversity in practice. The

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FASB expects that the guidance in this ASU will reduce the current and potential future diversity in practice in such areas. This ASU is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. We are currently evaluating the impact of the adoption of this ASU on our financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The FASB issued ASU 2016-09 to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences. This ASU is effective for annual and interim periods ending after December 15, 2016, with early adoption permitted. We adopted this ASU for the year ended December 31, 2016. The adoption of this standard did not have a material impact on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This guidance revises the accounting related to leases by requiring lessees to recognize a lease liability and a right-of-use asset for all leases. The new lease guidance also simplifies the accounting for sale and leaseback transactions. This ASU is effective for annual reporting periods beginning after December 15, 2018 and early adoption is permitted. We are currently evaluating the impact of the adoption of this ASU on our financial statements.

In November 2014, the FASB issued ASU No. 2014-16, *Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity*. The guidance requires an entity to determine the nature of the host contract by considering all stated and implied substantive terms and features of the hybrid financial instrument, weighing each term and feature on the basis of the relevant facts and circumstances (commonly referred to as the whole-instrument approach). ASU 2014-16 applies to all entities and is effective for annual periods beginning after December 15, 2015, and interim periods thereafter. Early adoption is permitted. We adopted this ASU for the year ended December 31, 2016. Adoption of this standard did not have material impact on our financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, requiring management to evaluate whether events or conditions could impact an entity's ability to continue as a going concern for at least one year after the date that the financial statements are issued and to provide disclosures if necessary. Disclosures will be required if conditions give rise to substantial doubt and the type of disclosure will be determined based on whether management's plans will be able to alleviate the substantial doubt. The ASU will be effective for the first annual period ending after December 15, 2016, and for annual periods and interim periods thereafter with early application permitted. We adopted this ASU for the year ended December 31, 2016. Adoption of this standard did not have material impact on our financial statements.

In June 2014, the FASB issued ASU No. 2014-12, *Compensation—Stock Compensation (Topic 718): Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could be Achieved after the Requisite Service Period*, which requires an entity to assess share-based awards with performance targets that could be achieved after the requisite service period for potential treatment as performance conditions. Under the ASU, compensation expense is to be recognized when the performance target is deemed probable and should represent the compensation expense attributable to the periods for which service has already been rendered. If the performance target is reached prior to achievement of the service period, the remaining unrecognized compensation cost should be recognized over the remaining service period. The ASU is effective for annual and interim periods beginning after December 15, 2015 with early adoption permitted. We adopted this ASU for the year ended December 31, 2016. The adoption of this standard did not have a material impact on our financial statements.

In May 2014, the FASB and the International Accounting Standards Board jointly issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU No. 2014-09"), which supersedes the revenue recognition

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requirements in ASC 605 and most industry-specific guidance. The new standard requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. The update also requires additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for public entities for annual and interim periods within those annual periods beginning after December 15, 2017. We are evaluating the method of adoption and the potential impact this standard may have on our financial position and results of operations.

## Business

### Overview

We are a clinical-stage biopharmaceutical company focused on the discovery and development of novel therapeutics for the treatment of cancer. Our two clinical assets are based on our core understanding of cyclin-dependent kinases, or CDKs, a family of proteins that play an important role in the growth and proliferation of all human cells. Two particular CDKs, CDK4 and CDK6, collectively known as CDK4/6, represent a validated and promising class of targets for anti-cancer therapeutics. We have leveraged our deep expertise in CDK4/6 biology to discover and develop two highly potent and selective CDK4/6 inhibitors that may have broad applicability across multiple cancer indications. We believe we are the only company with two distinct clinical-stage CDK4/6 inhibitors, trilaciclib and G1T38, each of which has the potential to be the backbone therapy of multiple combination regimens.

CDK4/6 is required for growth and proliferation in certain normal cell types, such as hematopoietic stem and progenitor cells, or HSPCs. HSPCs reside in the bone marrow and are the “reservoir” from which all blood and immune system cells are formed. Additionally, CDK4/6 plays an integral role in the growth and proliferation of certain types of tumors. Tumors that rely on CDK4/6 to grow and proliferate are referred to as CDK4/6-dependent tumors, and include the most common kinds of prostate and breast cancer. Alternatively, some tumors can grow and proliferate without CDK4/6 activity and are referred to as CDK4/6-independent. CDK4/6 independent tumors include small cell lung cancer, or SCLC, and triple-negative breast cancer, or TNBC. Our two CDK4/6 inhibitors were rationally designed to treat distinct patient populations with different combination regimens. Trilaciclib is in development in combination with chemotherapy for the treatment of patients with CDK4/6-independent tumors. G1T38 is in development in combination with targeted therapies for the treatment of patients with CDK4/6-dependent tumors.

Trilaciclib, our most advanced candidate, is a potential first-in-class intravenous CDK4/6 inhibitor we rationally designed to preserve HSPCs and enhance immune system function during chemotherapy. Chemotherapy has significant clinical utility and continues to be the most effective treatment for many cancers. However, it also damages HSPCs (myelosuppression) and the immune system (immunosuppression), leading to severe adverse effects and limiting anti-tumor activity. We believe that if the beneficial effects of chemotherapy (i.e. potent tumor cell killing) could be maximized, while minimizing the deleterious side-effects of myelosuppression and immunosuppression, patient outcomes would be significantly improved.

Based on compelling response rates and favorable tolerability shown in early-stage trials, trilaciclib is currently being evaluated in three randomized trials: two Phase 1b/2a trials in patients with SCLC, and one Phase 2 trial in patients with TNBC. We have completed the Phase 1b parts of the two SCLC trials, and initial data from the ongoing randomized, placebo-controlled Phase 2a parts of these trials are expected to be released in 2018. Initial data from the TNBC trial is also expected to be released in 2018.

To our knowledge, we are the only company developing a CDK4/6 inhibitor specifically for use with chemotherapy. We believe that trilaciclib has the potential to transform the chemotherapy treatment paradigm and significantly benefit patient outcomes. In addition, based on robust preclinical data, we believe that trilaciclib has the potential to significantly enhance the efficacy of immune checkpoint inhibitor/chemotherapy combinations. In December 2016, we entered into a non-exclusive collaboration with Genentech to evaluate trilaciclib in combination with Genentech’s checkpoint inhibitor Tecentriq to realize this potential.

G1T38, our second clinical-stage candidate, is a potential best-in-class oral CDK4/6 inhibitor being developed to be used in combination with other targeted therapies to treat multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor Ibrance and others in

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development. Our preclinical data and early clinical data indicate the potential for continuous daily dosing and improved antitumor activity and tolerability. A Phase 1 trial of G1T38 in 75 healthy volunteers showed a favorable safety profile leading to the initiation of a Phase 1/2 trial in ER+, HER2- breast cancer (in combination with Faslodex) in January 2017. Our plans for G1T38 include combinations in other cancers, such as non-small cell lung cancer, or NSCLC, where we expect to begin a Phase 2 trial in 2018 in combination with an EGFR inhibitor. We believe that G1T38 has the potential to be the backbone therapy of multiple proprietary combination regimens.

As shown in the table below, we designed two distinct CDK4/6 inhibitors, trilaciclib and G1T38, with unique properties for different uses:

### Two distinct CDK4/6 inhibitors, rationally designed and optimized by G1 Therapeutics

Drug	CDK4/6 tumor type	MOA	Dosing	Combination	Initial indications
Trilaciclib	Independent	Preserves HSPCs, enhances immune system function	IV, intermittent	Chemotherapy and/or checkpoint inhibitor	SCLC, TNBC
G1T38	Dependent	Stops tumor cell proliferation	Oral, daily	Targeted therapies (e.g. SERD, EGFRi)	ER+, HER2- breast cancer, NSCLC

As part of our strategy to develop wholly owned proprietary combinations that complement our CDK4/6 portfolio, we have exclusively in-licensed G1T48, a potential first/best-in-class oral selective estrogen receptor degrader, or SERD. We expect to initially develop G1T48 to be used in combination with G1T38 for the treatment of ER+, HER2- breast cancer. Based on compelling preclinical efficacy and safety data, we expect to file an investigational new drug application, or IND, or clinical trial authorization application, or CTA, for G1T48 in the fourth quarter of 2017. With an oral SERD (G1T48) and an oral CDK4/6 inhibitor (G1T38), we believe we are in a unique position as the only emerging biopharmaceutical company with a wholly owned, proprietary combination for this validated regimen in ER+, HER2- breast cancer. We plan to continue to leverage our proprietary assets and knowledge of CDK4/6 biology to explore additional combination treatments and to build a fully integrated oncology company.

Cancer is the second leading cause of death in the United States with approximately 1.7 million new cases and 600,000 deaths in 2016. We estimate that more than one million patients in the United States receive chemotherapy annually and that approximately 300,000 of these patients have CDK4/6-independent tumors where treatment with trilaciclib may provide significant benefit. Other cancers, such as many types of breast, prostate, colon, lung and brain cancers, as well as various hematologic malignancies, are CDK4/6-dependent. We estimate that at least 300,000 patients are diagnosed with late-stage CDK4/6-dependent tumors per year in the United States and could potentially benefit from G1T38. There are also approximately 160,000 women in the United States with late-stage ER+, HER2- breast cancer who could potentially benefit from G1T38 and G1T48. Given the size of these patient populations and the unmet medical need, we believe the worldwide market potential for each of our product candidates exceeds several billion dollars annually.

Broadly speaking, the treatment of cancer can be divided into three major therapeutic categories: chemotherapy, immunotherapy/checkpoint inhibitors, and targeted agents. Nearly all patients diagnosed with cancer get treated with one or more or a combination of these treatment modalities during the course of their disease. We believe that oncology has entered a new treatment paradigm involving combination therapies to attack multiple underlying mechanisms of cancer cell growth and survival.

- **Chemotherapy.** While chemotherapy can effectively kill tumor cells, its severe side-effects remain a major burden to patients and the healthcare system. For example, chemotherapy-induced myelosuppression causes abnormally low numbers of red blood cells, or anemia, abnormally low numbers of neutrophils, or neutropenia, and/or abnormally low numbers of platelets, or thrombocytopenia. Collectively, these “cytopenias” put patients at an increased risk for infection and bleeding, requiring hospitalizations, antibiotics, transfusions, and growth factor administrations. Dose reductions and delays are often needed to manage side-effects, limiting efficacy. Moreover, while chemotherapy induces tumor cell death, releasing neoantigens that are immunogenic, chemotherapy-induced immunosuppression impairs the generation of a robust, sustained anti-tumor immune response.
- **Cancer immunotherapy.** Cancer immunotherapy, the second broad category of cancer treatments, works by harnessing the body’s own immune system to recognize, attack, and eradicate malignant cells. There are several immunotherapy treatment modalities, including vaccines, engineered T-cells, and monoclonal antibodies. Monoclonal antibodies against a recently validated class of targets—immune checkpoints—have demonstrated unprecedented efficacy for patients with melanoma, bladder cancer, and non-small cell lung cancer, or NSCLC. Despite impressive durability, less than 30% of patients respond to checkpoint inhibitors, and several efforts are underway to increase response rates. One such approach is the use of chemotherapy at the time of checkpoint inhibitor administration. However, as noted above, despite chemo-induced immunogenic tumor cell death, chemotherapy also causes immunosuppression that can dampen the anti-tumor response and renders the treatment less effective.

If the beneficial effects of chemotherapy (i.e. potent tumor cell killing) could be maximized, while minimizing the deleterious side-effects of myelosuppression and immunosuppression, patient outcomes could be significantly improved. Trilaciclib has been developed to do exactly this: preserve HSPCs and enhance immune system function during chemotherapy. To our knowledge, we are the only company developing a CDK4/6 inhibitor in this way, and we believe that trilaciclib has the potential to transform the chemotherapy treatment paradigm and significantly benefit patient outcomes. We also believe that trilaciclib has the potential to become an essential component of checkpoint inhibitor/chemotherapy combination regimens.

- **Targeted therapies.** The third major class of anti-cancer agents is comprised of targeted therapies, which include therapies that block critical receptors or enzymes that transduce signals for tumor cells to proliferate. Typically, such targeted therapies are small molecule therapies taken orally, are less toxic than chemotherapy, and may be taken chronically. Examples include the Bruton’s tyrosine kinase (Btk) inhibitor Ibrutinib for B-cell malignancies, the epidermal growth factor receptor (EGFR) inhibitor Tagrisso for NSCLC, and the CDK4/6 inhibitor Ibrance for ER+, HER 2- breast cancer. Because cancer cells can become resistant to single-agent targeted therapies, combination regimens are being utilized more frequently. Each component of these combination regimens must be well tolerated to limit potential additive toxicities.




G1T38 is a potential best-in-class oral CDK4/6 inhibitor with broad applicability to multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor Ibrance and others in development. In 2015, Ibrance became the first FDA-approved CDK4/6 inhibitor for use as a combination therapy for the treatment of ER+, HER2- breast cancer. Despite a favorable efficacy/tolerability profile, patients on Ibrance must be monitored for abnormally low numbers of neutrophils, or neutropenia, and can only be given the drug on a 21 day-on/7 day-off schedule. Even with this dosing holiday, dose-delays and dose reductions due to persistent neutropenia are common. Despite these short comings, since its launch in the United States, Ibrance has been prescribed by more than 9,000 physicians to approximately 45,000 patients. Worldwide sales of Ibrance in 2016 were approximately \$2.1 billion and analysts estimate peak annual worldwide sales exceeding \$7 billion. Other CDK4/6 inhibitors in development have reported cardiovascular and liver side effects or gastrointestinal tolerability issues. We believe that G1T38 has the potential for continuous daily dosing and may be able to be given in combination with several targeted therapies that are on the market

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or in development. Moreover, our oral SERD, G1T48, gives us the opportunity to develop a wholly owned proprietary combination therapy, G1T38 + G1T48, for patients with ER+, HER2- breast cancer.

**Pipeline overview**

We believe that our CDK4/6 inhibitors candidates have the potential to treat nearly all forms of cancer and be administered in combination with most conventional and emerging cancer therapies. Both trilaciclib and G1T38 were designed and synthesized by us, and we hold an exclusive license to G1T48. We own or exclusively license the worldwide commercial rights to each of our product candidates, and hold or own exclusive rights to over 115 U.S. and international patents and pending patent applications covering our product development programs.

Program	Initial indications	Phase	Expected milestones	Additional potential indications	Worldwide commercial rights
<b>trilaciclib</b> (IV CDK4/6 inhibitor)	1st-line SCLC	1b/2a	Phase 1b complete. Report initial Phase 2a data in 2018	NSCLC, bladder, head and neck cancer	
	2nd/3rd-line SCLC metastatic TNBC	1b/2a 2	Phase 1b complete. Report initial Phase 2a data in 2018 Report initial data in 2018		
	1st-line SCLC plus Tecentriq	—	Initiate Phase 2 in 2Q17		
<b>G1T38</b> (oral CDK4/6 inhibitor)	ER+, HER2-breast cancer (plus Faslodex)	1/2	Report initial Phase 1 data in 2Q17	CRPC, Heme malignancies	
	NSCLC (plus EGFRi)	—	Initiate Phase 2 in 2018		
<b>G1T48</b> (oral SERD)	ER+, HER2-breast cancer	Preclinical	File IND/CTA in 4Q17		

*Trilaciclib*

We have completed a Phase 1 clinical trial in 45 healthy volunteers in which trilaciclib was well tolerated with no dose limiting toxicities, or DLTs, or serious adverse events, or SAEs, reported. Trilaciclib also demonstrated dose-dependent increases in exposure, and we identified the pharmacologically active dose to support testing in cancer patients. We are currently evaluating trilaciclib in combination with chemotherapy in three randomized trials: two Phase 1b/2a trials in extensive-stage SCLC (one as first-line treatment and another as second/third-line treatment) and a third Phase 2 trial in metastatic TNBC. In the two completed open-label Phase 1b parts of the SCLC trials, response rates and tolerability have compared favorably to historical chemotherapy-only trials. For example, in 17 evaluable patients in the Phase 1b part of the trial in first-line SCLC patients, we have seen an 88% response rate (including one complete response, or CR) and a clinical benefit rate of 94%. In historical chemotherapy-only trials, the response rates are approximately 50% and the CR rates are less than 1%. In the Phase 1b parts of these two trials, we treated 51 patients with over 250 cycles of trilaciclib and chemotherapy, and have not had a single episode of febrile neutropenia – one of the most common adverse consequences of these chemotherapy regimens.

Enrollment in the Phase 2a parts of the SCLC trials is expected to be completed in 2017 and initial data are expected in 2018. Enrollment in the Phase 2 TNBC trial is expected to be completed in 2018 and initial data are



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expected in 2018. As part of our non-exclusive collaboration with Genentech, we expect to begin a Phase 2 trial of trilaciclib in combination with Tecentriq and chemotherapy in first-line SCLC in the second quarter of 2017.

### *G1T38*

Our preclinical data demonstrate the potential for less neutropenia than Ibrance and an improved safety/tolerability profile versus other CDK4/6 inhibitors currently in development, indicating the potential for continuous daily dosing. We have recently completed a Phase 1 trial in 75 healthy volunteers, in which G1T38 was well-tolerated with no grade 3/4 adverse events. We initiated a Phase 1/2 trial in ER+, HER2- breast cancer patients (in combination with Faslodex, an FDA-approved intramuscular, or IM, SERD) in January 2017. Our plans for G1T38 include other major indications, such as NSCLC, where we expect to begin a Phase 2 trial in 2018 in combination with an EGFR inhibitor.

### *G1T48*

Based on compelling preclinical anti-tumor efficacy and safety data, we expect to file an IND and/or CTA for G1T48 in the fourth quarter of 2017.

## **Our strategy**

Our goal is to be a leader in the discovery and development of CDK4/6 inhibitor-based treatments for cancer. Our strategy includes the following key components:

- **Develop trilaciclib in combination with chemotherapy across multiple indications.** We believe that trilaciclib has the potential to be used to treat any patient with a CDK4/6-independent tumor who receives chemotherapy. We are currently evaluating trilaciclib in combination with chemotherapy in three randomized clinical trials: two Phase 1b/2a trials in patients with SCLC and a third Phase 2 trial in patients with TNBC. We have completed the Phase 1b parts of both SCLC trials. Enrollment in the Phase 2a parts of these trials is expected to be completed in 2017, and initial data are expected in 2018. The TNBC trial is expected to complete enrollment in 2018 and initial data are expected in 2018. Based on the outcomes of those trials, we expect to initiate trials in other cancers such as bladder and head and neck cancer.
- **Develop trilaciclib in combination with immune checkpoint inhibitors.** We believe that using trilaciclib in combination with chemotherapy and checkpoint inhibitors has the potential to significantly enhance efficacy. In December 2016, we entered into a collaboration with Genentech to evaluate trilaciclib in combination with Genentech's checkpoint inhibitor Tecentriq in multiple indications. A Phase 2 trial in first-line SCLC patients receiving chemotherapy is expected to be initiated in the second quarter of 2017, and trials in other indications are anticipated.
- **Develop G1T38 as a best-in-class treatment across multiple CDK4/6-dependent cancers.** We believe that G1T38 has the potential for less neutropenia than Ibrance and an improved safety/tolerability profile versus other CDK4/6 inhibitors currently in development. We have recently completed a Phase 1 trial in 75 healthy volunteers, in which G1T38 was well-tolerated with no grade 3/4 adverse events. We initiated a Phase 1/2 trial in ER+, HER2- breast cancer patients (in combination with Faslodex, an FDA-approved IM SERD) in January 2017. We plan to expand the development of G1T38 across multiple CDK4/6-dependent cancer indications, either alone or with one or more strategic collaborators. A phase 2 trial in NSCLC, in combination with an EGFR inhibitor, is planned for 2018.
- **Rapidly advance G1T48 into clinical trials in combination with G1T38.** The use of a selective CDK4/6 inhibitor in combination with a SERD has been validated by the FDA approval and commercial success of Ibrance. We

specifically in-licensed G1T48, a highly potent oral SERD, to advance into clinical trials with G1T38. With an oral SERD (G1T48) and an oral CDK4/6 inhibitor (G1T38), we believe we are in a unique position as the only emerging biopharmaceutical company with a wholly owned proprietary combination for this validated anti-cancer regimen. We expect to file an IND and/or CTA for G1T48 in the fourth quarter of 2017.

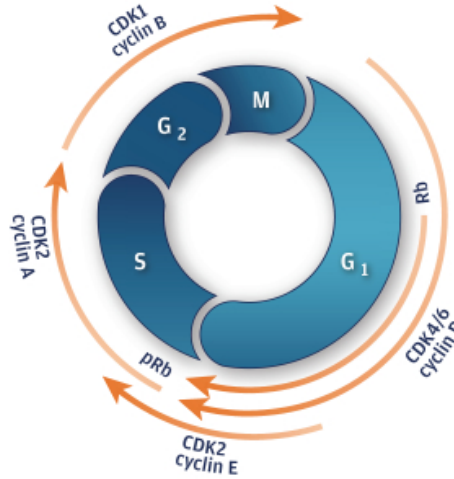
- **Pursue global development of combination therapies.** We believe our expertise in CDK4/6 biology puts us in an advantageous position to develop proprietary best-in-combination or first-in-combination therapies with the potential for improved efficacy and safety. We are developing G1T38 to be used in combination with other targeted therapies such as SERDs. The approval of Ibrance has created significant interest in the use of selective CDK4/6 inhibitors in combination with other targeted therapies for the treatment of cancer. Ibrance and the two other selective CDK4/6 inhibitors in clinical development are owned by large pharmaceutical companies. As a result, we believe that we are in a strong position to explore collaborative arrangements with other pharmaceutical and biotechnology companies that are interested in combining their targeted therapies with G1T38.
- **Build a fully integrated oncology company.** We plan to commercialize our product candidates on our own in the United States using a small and highly specialized sales force. We may also establish global or regional collaborations with pharmaceutical companies to leverage their development and commercialization capabilities and enable us to maximize the potential of our product candidates.

## Our focus: CDK4/6 biology

### *The importance of CDKs in cell cycle progression*

Cell proliferation, whereby a cell duplicates its contents and then divides into two cells, typically involves an orderly progression through four distinct phases of the cell cycle: G<sub>1</sub>, S, G<sub>2</sub> and M. The first phase in the cell cycle, the G<sub>1</sub> phase, is the period when the necessary proteins for DNA replication are synthesized and any damage to DNA is repaired. This is a major step in the cell cycle before transitioning to S phase. The duplication of DNA occurs during S phase, so called because this is when DNA is synthesized. In the G<sub>2</sub> phase, the cell confirms that complete replication of DNA has occurred and that all conditions are favorable to enter M phase. M phase is composed of two distinct steps: mitosis, which is the pairing and separation of the duplicated chromosomes, and cytokinesis, which is the physical process whereby the cell splits into two separate cells. This cell cycle progression is depicted in the figure below:

### *Cell Cycle Progression*

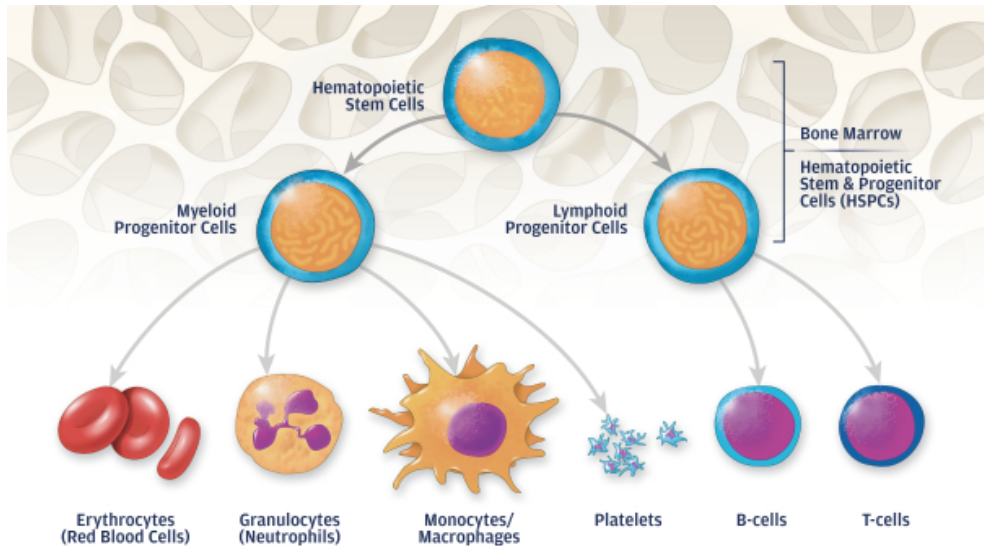


As shown above, CDKs control the transition across each phase of the cell cycle. Progression from G<sub>1</sub> phase into S phase is regulated by the retinoblastoma protein, or Rb, which prevents cells from entering into S phase. Progression from G<sub>1</sub> to S requires deactivation of Rb by a process known as phosphorylation, which is dependent on CDK4/6 and/or CDK2 activity. Controlled phosphorylation and deactivation of Rb is essential to progression from G<sub>1</sub> to S. In certain cells, including HSPCs and many tumor cells, phosphorylation of Rb is controlled predominately by CDK4/6. In CDK4/6-dependent cells, where CDK4/6 is required to phosphorylate Rb, inhibition of CDK4/6 by a selective small-molecule kinase inhibitor prevents phosphorylation, which arrests the cell in the G<sub>1</sub> phase. In some tumors, there is loss of Rb or loss of Rb function, and therefore such tumors can progress from G<sub>1</sub> to S without phosphorylation, making them CDK4/6-independent. These CDK4/6-independent tumors can proliferate even in the presence of a CDK4/6 inhibitor.

**CDK4/6 inhibition with trilaciclib: preserving HSPCs from damage by chemotherapy and enhancing immune system function**

Cancer chemotherapy involves treating patients with cytotoxic drugs that are designed to kill rapidly growing cancer cells in either the S phase or the M phase of the cell cycle. Chemotherapy has significant clinical utility and continues to be the most effective treatment for many cancers. However, chemotherapy also kills normal cells, including HSPCs. HSPCs reside in the bone marrow and play a critical role as the reservoir from which all cells of the blood and immune system are formed. Damage to HSPCs can result in the loss of blood and immune system cells causing serious and even life-threatening side effects, and limiting anti-tumor efficacy. The production of all blood and immune system cells from HSPCs is depicted in the figure below:

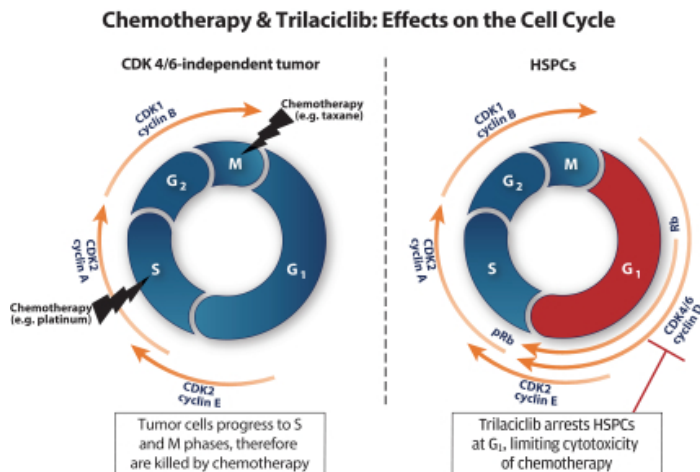
**Production of Blood and Immune System Cells from HSPCs**



Chemotherapy-induced myelosuppression caused by damage to HSPCs continues to represent the major DLT of chemotherapy and can be manifested as anemia, neutropenia, and/or thrombocytopenia. In addition, chemotherapy can cause a long-term decrease in lymphocytes, or lymphopenia, due to a phenomenon known as myeloid skewing, whereby HSPCs forego production of lymphoid cells (B-cells and T-cells) in favor of production of myeloid cells (red blood cells, neutrophils, monocytes and platelets). Furthermore, after repeated cycles of chemotherapy-induced damage, the ability of HSPCs to repopulate the cells of the blood and immune system can become compromised. This is known as bone marrow exhaustion. Accordingly, myelosuppression is the source of many of the serious side effects of cancer treatment such as infection, sepsis, bleeding, and fatigue. Clinical concerns raised by myelosuppression commonly lead to chemotherapy dose reductions that can limit therapeutic benefit. In addition to these debilitating side effects of chemotherapy, chemotherapy-induced immunosuppression may limit anti-tumor activity by preventing the patient's immune system from effectively mounting a sustained response against the cancer. Therefore, preserving the bone marrow and immune system from the cytotoxic effects of chemotherapy has the potential to enhance the anti-tumor activity of chemotherapy while minimizing myelotoxicity.

Because nearly all chemotherapeutics mediate their cytotoxic effects by inhibiting the cell cycle in either S phase (e.g., platinum-based agents) or M phase (e.g., taxanes), cells that are in G<sub>1</sub> phase are resistant to killing

by these S-phase and M-phase agents. CDK4/6-independent tumors have an unrestricted G1 to S phase transition, making them particularly susceptible to S- and M- phase agents. Our approach with trilaciclib takes advantage of the difference between tumor cells that are CDK4/6-independent and will progress into S or M phase and therefore be susceptible to chemotherapy, and HSPCs, which are CDK4/6-dependent and can be transiently arrested in the G1 phase by a CDK4/6 inhibitor and spared damage by chemotherapy. The figure below depicts how tumor cells are killed, and HSPCs are preserved:



We have also recently discovered that transient inhibition of CDK4/6 directly stimulates effector T-cells in the tumor microenvironment of mouse cancer models. Effector T-cells are important elements of the immune system that can directly kill tumor cells. We have observed that CDK4/6 phosphorylates a critical regulator of T-cell activation: nuclear factor of activated T-cells, or NFAT. Transient inhibition by trilaciclib of NFAT phosphorylation activates T-cells in the tumor microenvironment of mouse cancer models. We have observed that the activated T-cells secrete elevated levels of the anti-tumor cytokines interferon gamma and interleukin 2. When trilaciclib is combined with chemotherapy and/or a checkpoint inhibitor in these mouse models, anti-tumor activity is enhanced.

The mechanism of action, or MOA, of trilaciclib has been well characterized: trilaciclib directly affects HSPCs and T-cells. We believe that preserving HSPCs and enhancing immune system function during chemotherapy offers significant potential to minimize toxicity, while improving efficacy. We have rationally designed trilaciclib to achieve these objectives. Trilaciclib has the following attributes:

- highly potent CDK4/6 inhibition;
- highly selective for CDK4/6 versus CDK2 and other kinases, which is important for transient G1 arrest;
- highly targeted arrest of cells only in the G1 phase of the cell cycle;
- short-acting pharmacology in order to transiently arrest HSPC proliferation with temporal precision and activate T-cells; and
- IV formulation allowing convenient combination treatment with chemotherapy and/or checkpoint inhibitors.

The treatment of patients with CDK4/6-independent tumors with a CDK4/6 inhibitor represents a novel approach to cancer treatment. To our knowledge, we are the only company currently developing a CDK4/6

inhibitor for use in this patient population. We believe that trilaciclib has the potential to transform how patients are treated with chemotherapy and/or checkpoint inhibitors and significantly improve patient outcomes.




***CDK4/6 inhibition with G1T38: directly inhibiting the growth and proliferation of CDK4/6-dependent tumors***

The dysregulation of multiple CDK family members occurs commonly in human cancer, prompting long-standing interest in targeting CDKs as an anti-cancer strategy. However, poor initial understanding of the biology of the CDK family resulted in the development of nonselective pan-CDK inhibitors, including flavopiridol, roscovatine, dinaciclib and others, with significant toxicities that have limited their therapeutic potential in oncology. More recently, CDK4/6 has been identified as a critical regulator of the G<sub>1</sub> to S phase transition in CDK4/6-dependent tumors. It is now well understood that selective CDK4/6 inhibition without affecting other proteins in the CDK family is important for maximizing efficacy and minimizing toxicity.

The clinical utility of CDK4/6 inhibition in CDK4/6-dependent tumors has been validated by the FDA's accelerated approval in 2015 of the CDK4/6 inhibitor Ibrance – in combination with letrozole—for the treatment of post-menopausal women with ER+, HER2- advanced breast cancer. Selective CDK4/6 inhibitors have only shown modest activity as monotherapy agents, because their activity is primarily cytostatic, only arresting tumor cell proliferation, and not cytotoxic, i.e., directly killing the tumor cells. The anti-tumor activity of CDK4/6 inhibitors is increased when used in combination with other targeted anti-cancer therapies. In mouse CDK4/6-dependent tumor models, targeted therapies, such as androgen receptor, EGFR, MEK, Btk, Raf and PI3K inhibitors, have demonstrated greater activity when each of these targeted therapies is paired with a CDK4/6 inhibitor. This is also true clinically; Ibrance is approved for use only in combination with letrozole or Faslodex for the treatment of advanced breast cancer. G1T38 is being designed to be used in combination with other targeted therapies, including SERDs such as G1T48. We are also aggressively pursuing combination indications beyond breast cancer, and believe that there is broad potential for G1T38 in diseases such as NSCLC, prostate cancer and hematological malignancies.

## Our product candidates

Both trilaciclib and G1T38 were designed and synthesized by us, and we hold an exclusive license to G1T48. We own or exclusively license the worldwide commercial rights to each of our product candidates, and hold or own exclusive rights to over 115 U.S. and international patents and pending patent applications covering our product development programs. We believe the worldwide market potential for each of our product candidates exceeds several billion dollars annually.

Program	Initial indications	Phase	Expected milestones	Additional potential indications	Worldwide commercial rights
<b>trilaciclib</b> (IV CDK4/6 inhibitor)	1st-line SCLC	1b/2a	Phase 1b complete. Report initial Phase 2a data in 2018	NSCLC, bladder, head and neck cancer	
	2nd/3rd-line SCLC	1b/2a	Phase 1b complete. Report initial Phase 2a data in 2018		
	metastatic TNBC	2	Report initial data in 2018		
	1st-line SCLC plus Tecentriq	—	Initiate Phase 2 in 2Q17		
<b>G1T38</b> (oral CDK4/6 inhibitor)	ER+, HER2-breast cancer (plus Faslodex)	1/2	Report initial Phase 1 data in 2Q17	CRPC, Heme malignancies	
	NSCLC (plus EGFRi)	—	Initiate Phase 2 in 2018		
<b>G1T48</b> (oral SERD)	ER+, HER2-breast cancer	Preclinical	File IND/CTA in 4Q17		

### Trilaciclib: our novel approach to preserve HSPCs and enhance immune system function

Trilaciclib is a potential first-in-class, highly potent and selective, short-acting CDK4/6 inhibitor we are developing to be administered intravenously prior to chemotherapy. In preclinical studies, administration of trilaciclib prior to chemotherapy has been shown to induce a transient cell cycle arrest of HSPCs, protect HSPCs from chemotherapy-induced damage, preserve bone marrow and immune system function, protect from bone marrow exhaustion, improve complete blood count, or CBC, recovery, prevent myeloid skewing and consequent lymphopenia, and enhance chemotherapy anti-tumor activity.

Based on compelling response rates and favorable tolerability shown in early-stage trials, we are currently evaluating trilaciclib in combination with chemotherapy in three randomized clinical trials: two Phase 1b/2a trials in extensive-stage SCLC (one trial as first-line treatment and another as second/third-line treatment) and a third Phase 2 trial in metastatic TNBC. We have completed the Phase 1b parts of both SCLC trials. Enrollment in the Phase 2a parts of these trials is expected to be completed in 2017, and initial data are expected in 2018. The TNBC trial is expected to complete enrollment in 2018 and initial data are expected in 2018. As part of our non-exclusive collaboration with Genentech, we will begin a Phase 2 trial of trilaciclib in combination with Tecentriq and chemotherapy in first-line SCLC in the second quarter of 2017.

### Market opportunities for trilaciclib

Cancer is the second leading cause of death in the United States with approximately 1.7 million new cases and 600,000 deaths in 2016. Chemotherapy is still the standard of care treatment for multiple cancers. We estimate

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that more than one million patients in the United States receive chemotherapy annually and that approximately 300,000 of these patients have CDK4/6-independent tumors where treatment with trilaciclib may provide significant benefit.

Certain cancers are inherently or largely CDK4/6-independent, such as SCLC and TNBC, respectively. Additionally, many other cancers have significant subsets of patients that have CDK4/6-independent tumors and are treated by chemotherapy. For example, approximately 70% of patients with NSCLC have CDK4/6-dependent tumors, while approximately 30% of patients with NSCLC have CDK4/6-independent tumors. The major cell signaling pathways associated with CDK4/6-independent tumors are well understood, such as the role of inactivation of Rb. Rb status is often analyzed during cancer diagnoses, and we believe that evaluation of Rb status will allow us to identify a significant portion of patients with CDK4/6-independent tumors. While we are initially focusing the development of trilaciclib on patients with CDK4/6-independent tumors, we are also exploring the use of trilaciclib combined with chemotherapy and/or a checkpoint inhibitor in patients with CDK4/6-dependent tumors. We believe that the benefits of HSPC preservation and T-cell stimulation by trilaciclib may override any potential short-term protection of a CDK4/6 dependent tumor from chemotherapy.

Our first indication for trilaciclib is extensive-stage SCLC. SCLC is inherently CDK4/6-independent and accounts for approximately 15% of all lung cancers. Approximately 31,000 people are diagnosed annually with SCLC in the United States and approximately 70%, or 21,000, of those have extensive-stage disease. First-line treatment for extensive-stage SCLC is typically a chemotherapy regimen of carboplatin and etoposide, each of which has significant myelosuppressive side effects. While these patients often respond to chemotherapy, approximately 90% progress within one year and die within two years. Five-year survival rates are less than 5% for patients with extensive-stage SCLC. The last drug approved for the treatment of patients with SCLC was topotecan in 2007, which was approved in a second/third line setting and is highly myelosuppressive.

We have also initiated a Phase 2 trial of trilaciclib in TNBC. According to the World Cancer Research Fund International, breast cancer is the second most common cancer in the world and the most prevalent cancer in women, with an estimated 1.7 million cases of breast cancer diagnosed annually worldwide. TNBC makes up approximately 15-20% of such diagnosed breast cancers. Because TNBC cells lack key growth-signaling receptors, patients do not respond well to medications that block estrogen, progesterone, or HER2 receptors. Instead, treating TNBC typically involves chemotherapy, radiation, and surgery. In general, survival rates tend to be lower with TNBC compared to other forms of breast cancer, and TNBC is also more likely than some other types of breast cancer to return after it has been treated, especially in the first few years after treatment. We believe that approximately 80% of TNBC tumors are CDK4/6 independent. Accordingly, we believe that there is significant potential for treatment of TNBC with trilaciclib.

In addition, the treatment and prevention of myelosuppressive side effects is a large market opportunity. The only current treatment for chemotherapy-induced myelosuppression is growth factor support. Two main types of growth factors are commercially available: granulocyte-colony stimulating factor, or GCSF, and erythropoiesis stimulating agents, or ESAs. GCSF increases production of neutrophils after damage to HSPCs has occurred and is used to reduce the incidence of infection after chemotherapy. GCSF is administered starting 24 hours after the last dose of chemotherapy; hence, GCSF does not preserve the function of the bone marrow and immune system from chemotherapy damage. ESAs increase production of red blood cells after damage to HSPCs has occurred. Accordingly, ESAs also do not preserve the function of the bone marrow and immune system from chemotherapy. ESA use in oncology has diminished recently due to a "black box" warning related to death and serious cardiovascular events. Despite these limitations, we estimate that annual worldwide sales of growth factor support therapy in oncology exceeds \$7 billion.



**Advantages of trilaciclib**

We believe that treating patients with CDK4/6-independent tumors with trilaciclib prior to the administration of chemotherapy may have the following benefits and advantages:

- *Potential to minimize chemotherapy-induced myelotoxicity and immunosuppression.* Trilaciclib has been rationally designed and optimized to preserve HSPCs from damage by chemotherapy, thereby minimizing cytopenias.
- *Potential to improve efficacy by maintaining the chemotherapy dosing regimen.* Chemotherapy-induced myelosuppression is the major DLT of cytotoxic chemotherapy and can lead to dose reductions and schedule delays that can limit therapeutic benefit. Trilaciclib has been designed specifically to minimize myelosuppression and has the potential to enable maintenance of the indicated and planned chemotherapeutic dose and schedule.
- *Potential to improve efficacy by enhancing immune system function.* Based on our preclinical data, we have observed that trilaciclib activates T-cells in the tumor microenvironment. We believe that this T-cell activation, together with preservation of other components of the immune system, is contributing to the compelling response rates that we have observed with trilaciclib in early clinical trials to date.
- *Potential for combination with immune checkpoint inhibitors.* There are currently over 70 trials evaluating checkpoint inhibitors in combination with chemotherapy. We believe that administering trilaciclib with chemotherapy/checkpoint inhibitor combinations may increase efficacy. We are collaborating non-exclusively with Genentech to explore the utility of trilaciclib and their checkpoint inhibitor Tecentriq combined with chemotherapy. Our first indication is first-line SCLC, with a Phase 2 trial expected to begin in the second quarter of 2017. Trials in other indications are also anticipated.
- *Potential broad applicability.* We believe trilaciclib has the potential to benefit any patient that has CDK4/6-independent tumors and is treated with myelosuppressive chemotherapy. We estimate that there are approximately 300,000 such patients annually in the United States.
- *Convenience of administration.* Trilaciclib is designed to be administered via a 30-minute IV infusion prior to chemotherapy treatment. This dosing regimen fits with standard clinical practice for chemotherapy and/or checkpoint inhibitor treatment.
- *Reduced potential of secondary hematological malignancies.* Chemotherapy has been linked with secondary types of cancer that may occur years after initial treatment. HSPCs are especially sensitive to chemotherapy, and damage to HSPCs by chemotherapy can lead to both myelodysplastic syndrome and acute myelogenous leukemia. We believe that protecting HSPCs from the cytotoxic effects of chemotherapy has the potential to reduce incidence of these secondary hematological malignancies.
- *Potential to reduce the overall cost of care.* Chemotherapy-induced myelosuppression leads to severe adverse side effects, such as fatigue due to anemia, infections due to neutropenia, and bleeding due to thrombocytopenia. These adverse side effects often require costly hospitalizations, transfusions, antibiotic usage and/or treatment with growth factor support. Because trilaciclib has been designed specifically to minimize myelosuppression, we believe that it has the potential to reduce the overall cost of care. Our market research with payers supports the value proposition of trilaciclib.

## **Trilaciclib: preclinical and clinical development**

### *Preclinical development*

We have published extensive biochemical, cellular and *in vivo* data on trilaciclib demonstrating:

- transient and reversible G<sub>1</sub> arrest of HSPCs;
- protection of HSPCs from damage by chemotherapy;
- preservation of bone marrow and immune system function;
- improved CBC recovery;
- protection from bone marrow exhaustion;
- prevention of myeloid skewing and consequent lymphopenia;
- activation of T-cells in the tumor microenvironment; and
- enhancement of chemotherapy and checkpoint inhibitor anti-tumor activity.

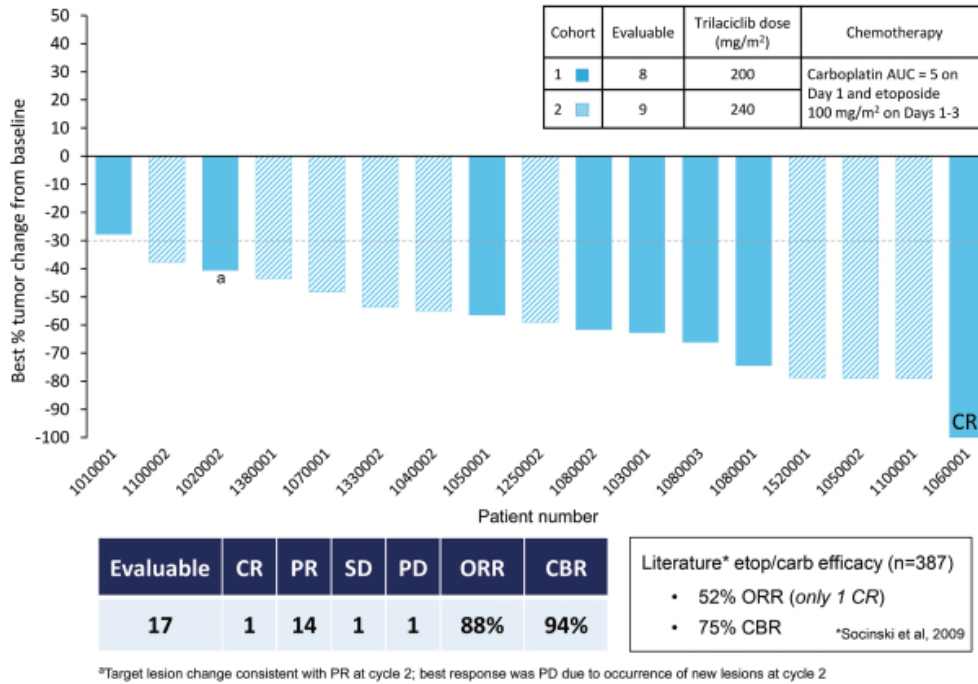
### *Completed Phase 1 clinical trial*

In 2015, we completed a Phase 1 clinical trial of trilaciclib in 45 healthy volunteers in the Netherlands. In this trial, subjects in seven cohorts were administered a single ascending dose of trilaciclib between 6 mg/m<sup>2</sup> and 192 mg/m<sup>2</sup>. The purpose of this trial was to evaluate the safety, pharmacokinetics, or PK, and identify a biologically effective dose of trilaciclib. Published data from this trial demonstrate that trilaciclib was well tolerated with no DLTs or SAEs reported. Trilaciclib also showed dose-dependent increases in exposure, and a biologically effective dose was established based on cell-cycle analysis of HSPCs obtained from bone marrow aspirates. These HSPC data demonstrated that the administration of trilaciclib resulted in the robust arrest of HSPCs in the G<sub>1</sub> phase for at least 32 hours and supported a starting dose of 200 mg/m<sup>2</sup> for studies in SCLC patients.

### *Ongoing Phase 1b/2a clinical trial in first-line treatment of SCLC*

In 2015, we initiated a two-part Phase 1b/2a clinical trial in first-line extensive-stage SCLC patients across multiple sites in the United States. The Phase 1b part of the trial was an open-label, dose-confirmation stage to confirm the trilaciclib dose to be used in the randomized, placebo-controlled Phase 2a part. The goals of the trial are to evaluate the safety, pharmacokinetics, or PK, and anti-tumor activity of trilaciclib in combination with the existing first-line chemotherapy standard of care regimen of etoposide and carboplatin and to confirm the dose to be used in future trials. All patients in the Phase 1b part were administered three-week cycles of trilaciclib plus etoposide/carboplatin, with an estimated four to six cycles administered in total per patient based on historical practice. Trilaciclib was administered as a 30 minute IV infusion once every chemotherapy treatment day prior to the dose(s) of etoposide/carboplatin. Tumor lesions were assessed by CT scans after cycles 2, 4 and 6 and complete blood counts, or CBCs were collected frequently. We enrolled 19 patients in the Phase 1b part and 17 patients were evaluable for tumor response. The overall response rate is 88%, with 14 confirmed partial responses, one confirmed complete response, one stable disease, one progressive disease, and a clinical benefit rate of 94%. Trilaciclib doses of 200 and 240 mg/m<sup>2</sup> were tested in the Phase 1b part of the trial, and 240 mg/m<sup>2</sup> was chosen for the randomized, placebo-controlled Phase 2a part.

The following waterfall plot shows the percent change in target lesions for the 17 evaluable patients in the Phase 1b part of this trial:

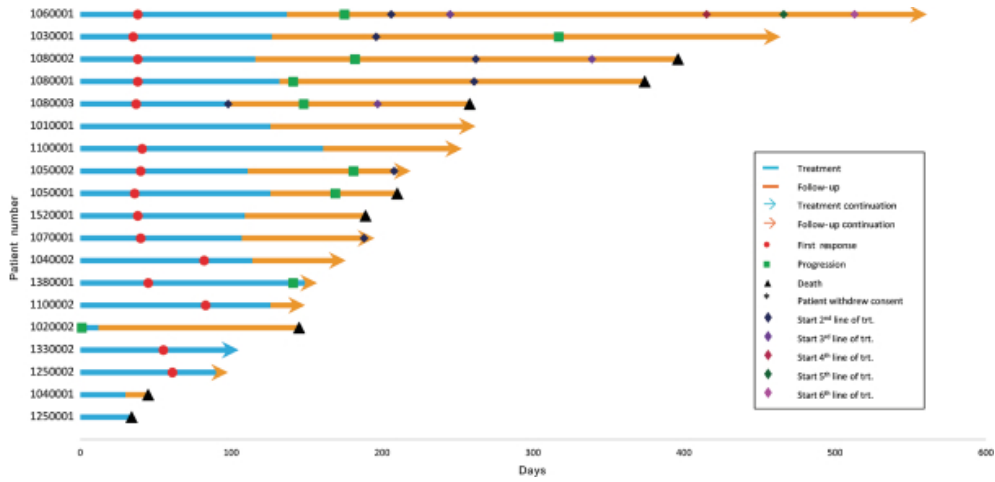


Efficacy is being evaluated based on industry standard Response Evaluation Criteria in Solid Tumors, or RECIST, which are the unified response assessment criteria agreed to by the World Health Organization, United States National Cancer Institute, and European Organisation for Research and Treatment of Cancer. RECIST defines disease progression and tumor response based on the sum of the longest diameters of a set of target tumor lesions identified at baseline. A 20% or greater increase in the sum of diameters in target lesions, or unequivocal progression in non-target lesions, or the appearance of a new lesion is defined as disease progression, or PD. A reduction in the sum of the diameters of at least 30% as compared to baseline is defined as a partial response, or PR. A complete disappearance of target and non-target lesions, and the normalization of any tumor markers, constitutes a complete response, or CR. Both partial and complete responses must be confirmed by repeat assessments at least four weeks after the partial or complete response was first documented. Stable disease, or SD, refers to patients who exhibit neither response nor disease progression. Non-progression refers to patients who exhibit complete response, partial response, or stable disease. Objective response rate, or ORR, is typically defined as the sum of the partial and complete response rates. Clinical benefit rate, or CBR, is typically defined as the sum of the partial and complete rates and stable disease.

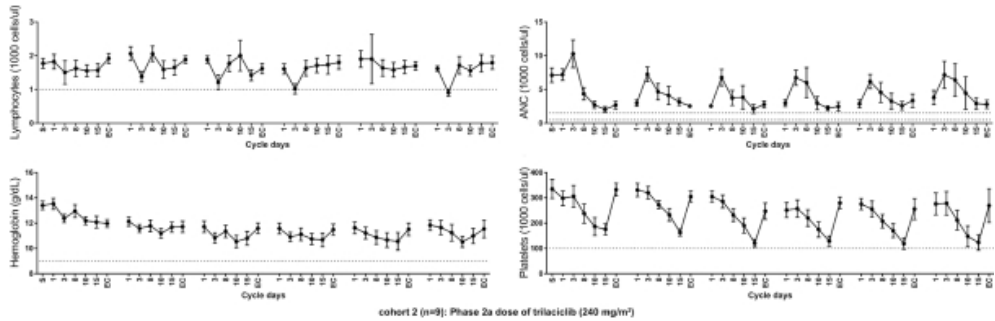
For context regarding these data, there are published data from a large Phase 3 clinical trial that enrolled 455 patients with extensive-stage SCLC who received first-line treatment of etoposide and carboplatin administered at the same dose and schedule as our clinical trial. The partial response rate in the 387 evaluable patients was 51% and the complete response rate was 0.3% (only one patient had a complete response).

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The following swimmer plot shows the treatment and follow-up history (as of January 20, 2017) for all 19 patients enrolled in the Phase 1b part of this trial:



The following graph shows the mean lymphocyte counts, absolute neutrophil counts, or ANC, hemoglobin levels, and platelet counts for the nine open-label patients in the Phase 1b part of the trial who received the Phase 2a dose of trilaciclib (240 mg/m<sup>2</sup>). These data show that there was no clinically-relevant hematological toxicity after administration of trilaciclib with etoposide and carboplatin. There were no episodes of febrile neutropenia in the Phase 1b part of the trial.



On the horizontal, or X, axes of the figures above, S refers to the baseline count before starting the trial. The numbers represent the days of each chemotherapy cycle and EC refers to the end of each cycle. The horizontal dotted lines for the blood cell types are at 1,000 cells/μl for lymphocytes, 500 and 1,500 cells/μl for ANC, 9 g/dL for hemoglobin and 100,000 cells/μl for platelets, which are commonly accepted thresholds of myelotoxicity.

We expect to present preliminary data from the Phase 1b part of this trial at the American Society of Clinical Oncology, or ASCO, Annual Meeting in June of 2017.

The Phase 2a part of this trial was initiated in the fourth quarter of 2016 at sites in the United States and Europe and consists of a double blind-design with patients randomized on a 1:1 basis to receive trilaciclib plus

etoposide/carboplatin, or placebo plus etoposide/carboplatin. Based on planned discussions with the FDA, the size of the Phase 2a part of the trial may be modified; however we currently plan to enroll 70 patients.

*Ongoing Phase 1b/2a clinical trial in second/third-line treatment of SCLC*

In 2015, we initiated a Phase 1b/2a clinical trial in second/third-line SCLC patients across multiple sites in the United States. The Phase 1b part of the trial was an open-label, dose-confirmation stage to confirm the trilaciclib dose to be used in the randomized, placebo-controlled Phase 2a part of the trial. The goals of the trial are to evaluate the safety, PK, and anti-tumor activity of trilaciclib in combination with the existing second-line chemotherapy standard of care regimen of topotecan and to confirm the dose to be used in future trials. All patients in the Phase 1b part were administered three-week cycles of trilaciclib plus topotecan until the progression of disease. Trilaciclib was administered as a 30 minute IV infusion once every day prior to the dose of topotecan. Tumor lesions were assessed by CT scans after every even cycle and CBCs were collected frequently.

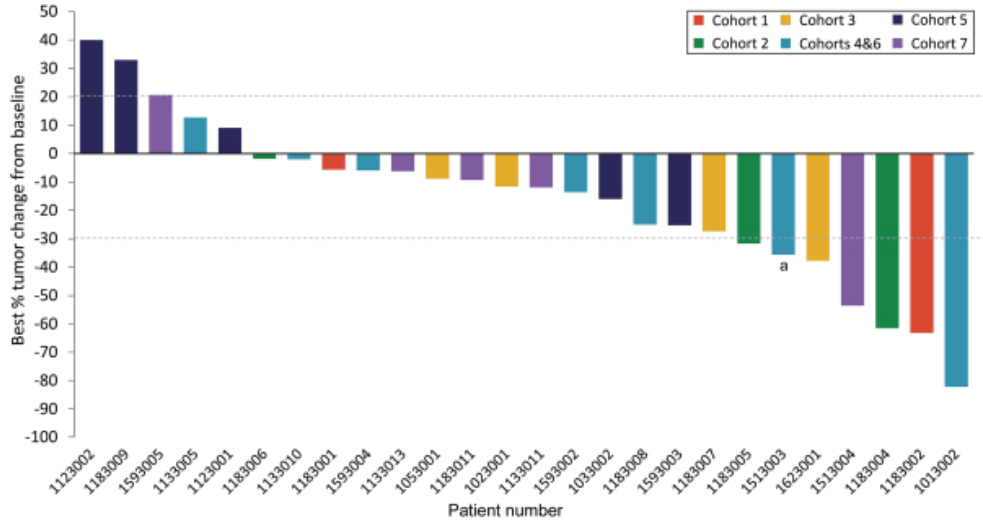
We enrolled 32 patients in the open-label Phase 1b part and 29 patients were evaluable for tumor response as of an interim data cut-off of January 20, 2017. The overall response rate is 22%, with six confirmed partial responses, 15 with stable disease, and eight with progressive disease. The clinical benefit rate is 72%.

Trilaciclib doses of 200 to 280 mg/m<sup>2</sup> and topotecan doses of 0.75 to 1.5 mg/m<sup>2</sup> were tested across 7 cohorts in the completed Phase 1b open-label part of the trial. The combination of trilaciclib with topotecan resulted in an anticipated drug-drug PK interaction, requiring the testing of several dose levels of topotecan and trilaciclib prior to defining the Phase 2a doses for both drugs. Topotecan is excreted primarily by the kidney. To prevent toxic, supratherapeutic levels of topotecan in patients with impaired kidney function, there are two FDA approved doses for topotecan. For patients with normal kidney function, the labeled dose for topotecan is 1.5 mg/m<sup>2</sup>; for patients with impaired kidney function it is 0.75 mg/m<sup>2</sup>. Because trilaciclib inhibits a specific kidney transporter thought to be important for the excretion of topotecan, we saw supratherapeutic plasma levels of topotecan at the 1.5 and 1.25 mg/m<sup>2</sup> doses and normal therapeutic levels of topotecan at the 0.75 mg/m<sup>2</sup> dose. Accordingly, doses chosen for the randomized, placebo-controlled Phase 2a part of this trial are trilaciclib 240 mg/m<sup>2</sup> and topotecan 0.75 mg/m<sup>2</sup>. We do not anticipate trilaciclib to affect the plasma levels of any other chemotherapeutic, and have not seen any effect on carboplatin or etoposide plasma levels in the first-line trial. Importantly, we have not seen any deleterious effects of trilaciclib on kidney function in general. All patients have maintained normal renal function.

In the Phase 1b part to date, more than 135 cycles of trilaciclib and topotecan have been administered. Of these, a total of 3 cycles were administered at a topotecan dose of 1.5 mg/m<sup>2</sup> in 2 patients, and 7 cycles were administered at a dose of 1.25 mg/m<sup>2</sup> in 5 patients. Most of the remaining cycles were administered at a topotecan dose of 0.75 mg/m<sup>2</sup>, including patients in the early cohorts who received 1 or 2 cycles with doses higher than 0.75 mg/m<sup>2</sup> before reducing the dose to 0.75 mg/m<sup>2</sup> for their remaining cycles.

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The following waterfall plot shows the percent change in target lesions for all 29 patients evaluable for tumor response as of an interim data cutoff of January 2017 in the open-label Phase 1b part of the trial. Three of the 29 evaluable patients had clinical progression prior to their first scan and they are not represented in the waterfall plot below.



	PR	SD	PD	ORR	CBR
<b>Overall (n=29)*</b>	<b>6*</b>	<b>15</b>	<b>8</b>	<b>21%</b>	<b>72%</b>
<b>Sensitive (n=17)</b>	<b>4</b>	<b>8</b>	<b>5</b>	<b>24%</b>	<b>71%</b>
<b>Resistant (n=8)</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>13%</b>	<b>63%</b>

\* 1<sup>st</sup>-line sensitivity unknown for 4 patients, including 1 patient with PR

Topotecan response rates in 2<sup>nd</sup>-line (per literature<sup>\*\*</sup>)

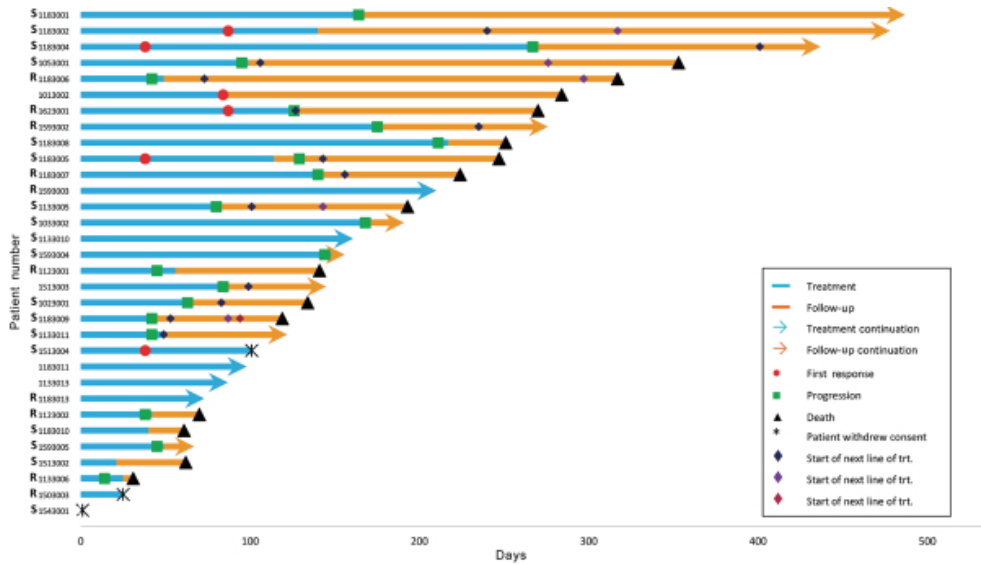
- ORR of 17-24%
  - 23% for sensitive patients
  - 9% for resistant/refractory patients
- CBR of 44-62%

\*\*Von Pawel et al 1999, 2014

\*Target lesion change consistent with SD at cycle 2, PR at cycle 4; best response was SD due to occurrence of new lesions at cycle 4

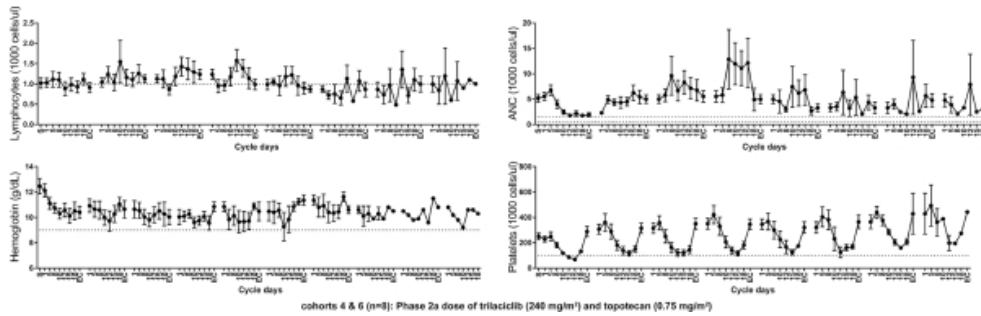
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The following swimmer plot shows the treatment and follow-up history (as of January 20, 2017) for all 32 patients enrolled in the Phase 1b part of this trial:



For context regarding these data, there are published data from a large Phase 3 trial that enrolled 213 patients with second-line SCLC who received topotecan administered at a dose of 1.5 mg/m<sup>2</sup>, which results in similar plasma drug levels as topotecan 0.75 mg/m<sup>2</sup> given with trilaciclib 240 mg/m<sup>2</sup>. The overall response was 17%.

The following mean graph shows the lymphocyte counts, ANC, hemoglobin levels, and platelet counts for eight patients in the Phase 1b part of the trial who received the chosen Phase 2a doses of trilaciclib 240 mg/m<sup>2</sup> and topotecan 0.75 mg/m<sup>2</sup>. These data demonstrate that there was no clinically-relevant hematological toxicity after administration of trilaciclib with topotecan, including no grade 4 thrombocytopenia or neutropenia. For context, the incidence of grade 4 thrombocytopenia and neutropenia with topotecan has been reported to be 27% and 39%, respectively. In addition, there have been no episodes of febrile neutropenia in the entire study, whereas the historical rate of febrile neutropenia with topotecan is approximately 30%.



On the horizontal, or X, axes of the figures above, S refers to the baseline count before starting the trial. The numbers represent the days of each chemotherapy cycle and EC refers to the end of each cycle. The horizontal

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dotted lines for the blood cell types are at 1,000 cells/ $\mu$ l for lymphocytes, 500 and 1,500 cells/ $\mu$ l for ANC, 9 g/dL for hemoglobin and 100,000 cells/ $\mu$ l for platelets.

We presented preliminary data from the Phase 1b part of this trial at the World Conference on Lung Cancer in December of 2016.

The Phase 2a part of the trial was initiated in the first quarter of 2017 and consists of a double blind-design with patients randomized on a 2:1 basis to receive trilaciclib plus topotecan, or placebo plus topotecan. U.S. and European sites will participate in this part of the study. Based on planned discussions with the FDA, the size of the Phase 2 part may be modified; however we currently plan to enroll 60 patients.

### *Ongoing Phase 2 clinical trial in TNBC*

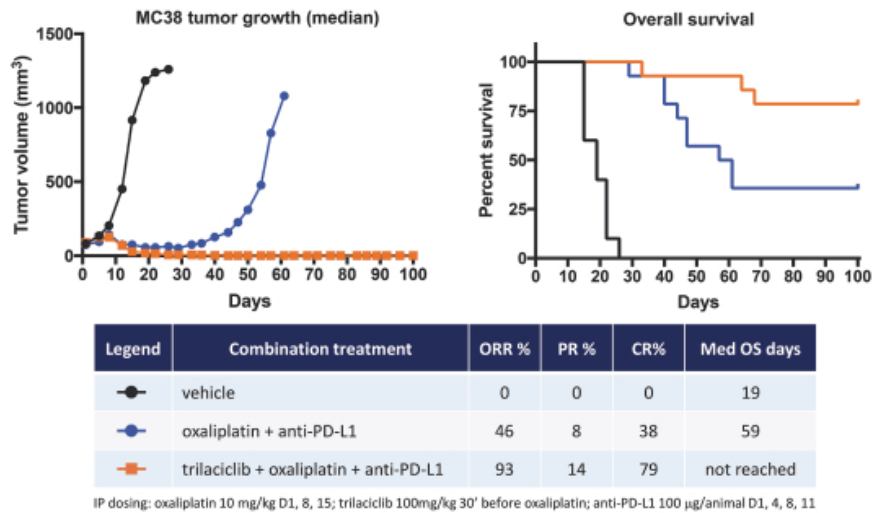
In January 2017, we initiated an open label, randomized, Phase 2 trial that is expected to enroll approximately 90 patients with first or second-line metastatic TNBC across multiple sites in the United States and Europe. The goals of the clinical trial are to evaluate the safety, PK, and anti-tumor activity of trilaciclib in combination with the existing chemotherapy standard of care regimen of gemcitabine and carboplatin. Tumor lesions are being assessed by CT scans or MRI after every even cycle and CBCs are being collected frequently. Patients will be randomized to one of three arms with the drugs given in three-week cycles until the progression of disease.

### ***The potential to use trilaciclib in combination with checkpoint inhibitors***

Recent developments in the field of immunotherapy, including checkpoint inhibitors, have shown anti-tumor responses with unprecedented durability. However, despite impressive durability, less than 30% of patients respond to checkpoint inhibitors. Because trilaciclib can preserve HSPCs and enhance immune system function, we believe that using trilaciclib in combination with chemotherapy and checkpoint inhibitors has the potential to increase response rates and enhance efficacy. In December 2016, we entered into a collaboration with Genentech to evaluate trilaciclib in combination with Genentech's checkpoint inhibitor Tecentriq in small cell lung cancer. A Phase 2 trial in first-line SCLC patients receiving chemotherapy is expected to be initiated in the second quarter of 2017, and trials in other indications are anticipated.



The figure below demonstrates the rationale for combining trilaciclib with Tecentriq (an anti-PD-L1 antibody) and chemotherapy. In this preclinical study, trilaciclib was administered with the chemotherapy oxaliplatin and an anti-PD-L1 antibody to immune-competent tumor-bearing mice. The trilaciclib arm shows significantly better anti-tumor activity and overall survival compared to the oxaliplatin, anti-PD-L1 antibody arm. MC38 tumors are CDK4/6-independent, and other experiments have demonstrated that trilaciclib monotherapy does not inhibit MC38 tumor growth. Therefore, trilaciclib's effects on HSPCs and T-cells are likely responsible for enhancing the efficacy of the oxaliplatin/anti-PD-L1 combination.



**G1T38: Our potential best-in-class CDK4/6 inhibitor for patients with CDK4/6-dependent tumors**

G1T38, our second clinical-stage candidate, is a potential best-in-class oral CDK4/6 inhibitor, to be used in combination with other targeted therapies to treat multiple cancers. We rationally designed G1T38 to improve upon and address the shortcomings of the approved CDK4/6 inhibitor Ibrance and others in development. Our preclinical data and early clinical data indicate the potential for continuous daily dosing and improved antitumor activity and tolerability. A Phase 1 trial of G1T38 in 75 healthy volunteers showed a favorable safety profile, and we initiated a Phase 1/2 trial in ER+, HER2- breast cancer in January 2017. Our plans for G1T38 include combinations in other cancers, such as NSCLC, where we expect to begin a Phase 2 trial in 2018 in combination with an EGFR inhibitor. We believe that G1T38 has the potential to be the backbone therapy of multiple proprietary combination regimens.

**Market opportunity for G1T38**

Many different cancers, such as many types of breast, prostate, colon, lung and brain cancers, as well as various hematologic malignancies, are CDK4/6-dependent. We estimate that at least 300,000 patients are diagnosed with late-stage CDK4/6-dependent tumors per year in the United States. The importance of CDK4/6 as a key regulator of tumor cell growth and proliferation in CDK4/6-dependent tumors has been recently validated by the FDA's accelerated approval of Pfizer's CDK4/6 inhibitor Ibrance for the treatment of ER+, HER2- advanced breast cancer in post-menopausal women and in women with disease progression following endocrine therapy. Since its launch in the United States, Ibrance has been prescribed by more than 9,000 physicians to

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approximately 45,000 patients. Worldwide sales of Ibrance in 2016 were approximately \$2.1 billion, and analysts estimate peak annual worldwide sales exceeding \$7 billion.

### **Advantages of G1T38**

We believe that G1T38 has the potential to be a best-in-class CDK4/6 inhibitor. There are currently three other selective CDK4/6 inhibitors being developed to treat CDK4/6-dependent tumors, including Ibrance. Each of these drugs has shortcomings that we believe could be addressed by a best-in-class CDK4/6 inhibitor. Ibrance has a long half-life that can lead to drug accumulation and neutropenia, requiring a dosing regimen of 21 days on drug and a treatment holiday of at least seven days off drug. Another CDK4/6 inhibitor in development has demonstrated significant gastrointestinal issues, which may make it difficult to combine with targeted therapies, which typically also carry their own side-effect liabilities. The other CDK4/6 inhibitor in development has exhibited cardiovascular and liver side effects.

We believe that G1T38 has the potential to be best-in-class because of the following advantages:

- *Less myelotoxicity.* In preclinical studies, G1T38 has demonstrated less myelotoxicity than Ibrance, but equivalent anti-tumor efficacy. We believe this is due to the inherently different PK properties of G1T38.
- *Potential for continuous daily dosing.* Patients on Ibrance can only be given the drug on a 21 day-on/7 day-off schedule. Even with this dosing holiday, dose-delays and dose reductions due to persistent neutropenia are common. Our preclinical data and clinical data to date with G1T38 demonstrate the potential for continuous daily dosing.
- *Improved cardiovascular and liver safety.* G1T38 has not shown any of the QT prolongation issues and liver injury associated with one of the other CDK4/6 inhibitors currently in clinical development.
- *Improved tolerability profile.* We have designed G1T38 to be selective for CDK4/6 and have minimal CDK2 activity, as inhibition of CDK2 has been associated with gastrointestinal toxicities.
- *Greater potential for combination therapies.* We believe that G1T38 is the only selective CDK4/6 inhibitor in development that is not currently owned by a large pharmaceutical company. We believe that other pharmaceutical and biotech companies with targeted therapies may want to test a combination of their therapies with our CDK4/6 inhibitor. Accordingly, we believe we are in a strong position to explore collaborative arrangements with these companies.

### **G1T38: preclinical and clinical development**

#### *Preclinical development*

We have generated extensive biochemical, cellular and *in vivo* data on G1T38 demonstrating:

- high potency and selectivity for CDK4/6;
- equivalent anti-tumor activity to Ibrance when dosed orally once daily for 28-days in a mouse model of ER+, HER2- breast cancer;
- less myelotoxicity than Ibrance in mouse models, suggesting the potential for continuous daily dosing without the need for a treatment holiday; and
- anti-tumor efficacy in models of certain CDK4/6-dependent tumor types, such as NSCLC and castrate resistant prostate cancer, or CRPC.

*Completed Phase 1 clinical trial*

In the fourth quarter of 2016, we completed a Phase 1 clinical trial of G1T38 in 75 healthy volunteers in the Netherlands. This was a single ascending dose, placebo-controlled study testing doses of 3 to 600 mg. In addition, G1T38 was dosed at 200 and 300 mg twice a day, 300 mg with and without food, and 300 mg as an oral solution. The goals of the clinical trial were to obtain PK and safety data to inform appropriate starting dose(s) for studies in patients. There were no DLTs, SAEs, or grade 3/4 AEs reported in this study. The most common grade 1/2 AE was nausea, reported by 27% of subjects. A fed/fasted cohort demonstrated that taking G1T38 after a meal did not result in any nausea and that food had no effect on PK. Therefore, we expect that G1T38 will be taken with food in all upcoming studies. There was a dose-dependent increase in drug levels in the body, and we identified a well characterized active metabolite called G1T30, which we expect will make a significant contribution to the overall levels of active drug in the body.

*Ongoing Phase 1/2 clinical trial in ER+, HER2- breast cancer*

In January 2017, we initiated a two part Phase 1/2 trial in ER+, HER2- breast cancer patients in combination with Faslodex, an FDA-approved SERD. The trial is expected to enroll up to 102 patients in Europe. The goals of the clinical trial are to evaluate the safety, PK, and anti-tumor activity of G1T38 in combination with Faslodex and to determine the dose to be used in future trials. The Phase 1 part is open-label and consists of two arms, with G1T38 dosed continuously without a holiday, either once a day or twice a day in combination with Faslodex. Once the dose and schedule have been determined, the Phase 2 part will enroll approximately 30 patients at the recommended G1T38 dose and schedule in combination with Faslodex. All patients in the trial are being administered G1T38 orally continuously without a treatment holiday and IM Faslodex per the label. Tumor lesions are being assessed under RECIST criteria by CT scans or MRI every 8 weeks.

**G1T48: Our oral SERD**

G1T48, is a potential first/best-in-class oral SERD, which we plan to initially develop to use in combination with G1T38 for the treatment of ER+, HER2- breast cancer. Based on compelling preclinical efficacy and safety data, we expect to file an IND and/or CTA for G1T48 in the fourth quarter of 2017.

**Market opportunity for G1T48**

Breast cancer is the most prevalent cancer in women, accounting for 30% of all female cancers in the United States. The major cause of death from breast cancer is metastases, and approximately 30% of early-stage patients develop metastatic disease. Approximately 65% of breast cancers are ER-positive, or ER+, and depend on estrogen signaling for growth and survival. Patients with ER+ breast cancers are typically treated with endocrine therapies such as aromatase inhibitors, or AIs, selective estrogen receptor modulators, or SERMs, and SERDs. AIs, which block the generation of estrogen, and SERMs, which selectively inhibit an ER's ability to bind estrogen, both block ER-dependent signaling but leave functional ERs present in breast cancer cells. For this reason, although AIs and SERMs are effective treatments for some breast cancers, many patients acquire resistance to them by developing the ability to signal through the ER in a ligand-independent manner. In contrast, SERDs are a class of endocrine therapies that directly induce ER degradation. Therefore, it is believed that SERDs have the potential to treat ER+ tumors without allowing ligand-independent resistance to develop, and to act on AI- and SERM-resistant ER-positive tumors.

Currently only one SERD, Faslodex, is approved for the treatment of ER+ metastatic breast cancer. Faslodex is administered as an IM injection, and requires a loading dose during the first month of treatment. This means it is typically given on days 1, 15, and 29 of treatment and then once monthly thereafter. Each treatment typically

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consists of two injections, one into each buttock. Injection site reactions are common, occurring in approximately 10% of patients. Injection site related events including sciatica, neuralgia, neuropathic pain, and peripheral neuropathy have been reported. Other frequently reported adverse reactions with Faslodex include nausea (9.7%) and bone pain (9.4%).

While there are several oral SERDs in early clinical development, no one candidate has emerged as a clear front runner as an oral alternative to Faslodex based on early results. Limited efficacy has been reported in some of the oral SERDs in development and one has been shown to possess ER agonist activity without complete receptor degradation, suggesting that it is a SERM rather than a SERD with complete antagonist activity.

### **Advantages of G1T48**

We believe that G1T48 has the potential to be first/best-in-class because of the following advantages:

- *Higher potency.* In preclinical models of ER+, HER2- breast cancer, G1T48 is more potent than Faslodex in binding and degrading the ER and inhibiting cell growth.
- *Complete antagonism.* G1T48 is a complete antagonist with no agonist activity.
- *Improved oral efficacy.* G1T48 demonstrated improved activity compared to another oral SERD in development in preclinical models of endocrine resistance mediated by ER mutation. G1T48 also demonstrated better efficacy than other oral SERDs in development in a tamoxifen resistant model of ER+, HER2- breast cancer.
- *Ease of administration.* The only approved SERD, Faslodex, is required to be given via IM injection. We have designed G1T48 to be administered orally.
- *Wholly owned proprietary combination regimen.* To our knowledge, we are the only emerging biopharmaceutical company with both an oral SERD (G1T48) and an oral CDK4/6 inhibitor (G1T38). We believe that being in the unique position of having this wholly owned proprietary combination of a validated regimen for the treatment of ER+, HER2- breast cancer provides us a strategic and competitive advantage.

### **G1T48: Preclinical development**

We have generated extensive biochemical, cellular and *in vivo* data on G1T48 demonstrating:

- *Drug-like properties.* Soluble, rule of 5 compliant, non-steroidal small molecule, reversible estrogen receptor degrader
- *Highly potent.* In preclinical models of ER+, HER2- breast cancer, G1T48 is more potent than Faslodex in binding and degrading ER and inhibiting tumor cell growth.
- *Active on ER mutant receptors.* In preclinical models of endocrine resistance mediated by ER mutation, G1T48 demonstrated superior activity compared to another oral SERD in development.
- *Highly selective.* G1T48 is highly selective for ER relative to other enzymes and receptors
- *Complete ER degradation.* Binding of G1T48 to ER leads to complete degradation by the proteasome
- *Favorable safety profile.* In multi-day toxicology studies in rats and dogs demonstrated a favorable safety profile, with a clean genotoxicity screen and no cardiovascular safety concerns.
- *Oral efficacy.* G1T48 demonstrated single agent efficacy in a tamoxifen resistant model of ER+, HER2- breast cancer which was further enhanced when combined with G1T38

## Commercialization

Given our stage of development, we have not yet established our own commercial organization or distribution capabilities. We believe our focus on oncology will enable us to efficiently commercialize our product candidates on our own in the United States using a small and highly specialized sales force. However, we may also establish global or regional collaborations with pharmaceutical companies to leverage their development and commercialization capabilities to maximize the potential of our product candidates.

## Manufacturing

We do not own or operate, and currently have no plans to establish any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacture of any drugs that we may commercialize. To date, we have obtained active pharmaceutical ingredients, or API, formulations, and drug products for trilaciclib, G1T38 and G1T48 for our preclinical studies and clinical trials from multiple third-party manufacturers. We obtain our supplies from these manufacturers on a purchase order basis and do not have long-term supply arrangements in place. We have arrangements in place for a redundant supply of API. For each of our product candidates, we are in the process of identifying and qualifying additional manufacturers to provide the API, formulations, and drug products prior to approval and commercialization.

## Competition

The development and commercialization of new drug therapies is highly competitive. We will face competition with respect to all therapeutics we may develop or commercialize in the future from pharmaceutical and biotechnology companies worldwide. If any of our product candidates is approved, they will compete with currently marketed drugs and therapies used for treatment of the same indications, and potentially with product candidates currently in development for the same indications. Many of the entities marketing or developing potentially competing products have significantly greater financial resources and expertise than we do in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing. We believe the key competitive factors affecting the success of any approved product will be its efficacy, safety profile, price, convenience of administration, and level of promotional activity. Accordingly, our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer side effects, are more convenient or are less expensive than any products that we may develop.

If trilaciclib is approved, it will compete with:

- existing growth factor support treatments, including Neulasta (pegfilgrastim), Neupogen (filgrastim), Procrit (epoetin alpha), and Aranesp (darbepoetin alfa) as well as biosimilars of these products when available;
- if approved, rovalpituzumab tesirine (Rova-T), an antibody drug conjugate currently being developed by Abbvie for the treatment of patients with SCLC;
- if approved, the multiple immune checkpoint inhibitors in clinical trials for the treatment of patients with SCLC; and
- multiple approved drugs or drugs that may be approved in the future for indications for which we may develop trilaciclib.

If G1T38 is approved, it will compete with:

- Pfizer's approved CDK4/6 inhibitor Ibrance;

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- if approved, the CDK4/6 inhibitor product candidates currently in clinical development by Eli Lilly (abemaciclib) and Novartis (ribociclib);
- if approved, other non-selective CDK4/6 inhibitor product candidates in clinical development, including product candidates being developed by FLX Bio and Onconova Therapeutics; and
- multiple approved drugs or drugs that may be approved in the future for indications for which we may develop G1T38.

If G1T48 is approved, it will compete with:

- the approved IM SERD, Faslodex, being marketed by AstraZeneca;
- if approved, other oral SERDs in development including: RAD1901, being developed by Radius Health; GDC-0810 and GDC-0927 (formerly SRN-927), being developed by Genentech; AZD9496, being developed by AstraZeneca; and LSZ102, being developed by Novartis; and
- multiple approved drugs or drugs that may be approved in the future for indications for which we may develop G1T38.

## **Intellectual property**

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our CDK4/6 inhibitor molecules, including our CDK4/6 inhibitors in clinical trials and methods of treatment using our CDK4/6 inhibitors, alone and in combination with other therapeutic agents. We also seek protection on processes for the production of our CDK4/6 inhibitors, formulations incorporating our CDK4/6 inhibitors, combinations of our product candidates with other active agents and dosing schedules and regimens related to our CDK4/6 inhibitors. Our success also depends on our ability to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications covering our proprietary technology, inventions, and improvements that are important to the development and implementation of our business. In addition, we plan to seek patent term restorations and/or patent term extensions where applicable in the United States and other jurisdictions. We also rely on trade secrets, know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our proprietary position. Additionally, we expect to benefit, where appropriate, from statutory frameworks in the United States, Europe and other countries that provide a period of clinical data exclusivity to compensate for the time required for regulatory approval of our drug products. See also the “— Government Regulation and Product Approval” section below.

We are the sole owner or exclusive licensee of all of our patents and currently filed patent applications that cover our product candidates.

Our intellectual property strategy is focused on patenting our CDK4/6 inhibitors, their uses, and methods of manufacturing. We have obtained nine composition-of-matter patents in the United States on a number of our CDK4/6 inhibitors, including claims that cover our product candidates trilaciclib and G1T38, and we continue to seek composition-of-matter patents on additional CDK4/6 inhibitors both in the United States and throughout the world. In addition, we continue to seek method-of-treatment patents for our key CDK4/6 inhibitors in key therapeutic areas. We also seek patent protection on methods of treatment that incorporate our CDK4/6 inhibitors in combination with other therapeutic agents to treat specific clinical indications and targeted patient populations. Furthermore, we will seek, where appropriate, patent protection on processes of making certain of our CDK4/6 inhibitors, and intermediates used in the processes.

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We continually assess and refine our intellectual property strategy as we develop new technologies and product candidates. We plan to file additional patent applications based on our intellectual property strategies where appropriate, including where we seek to adapt to competition or to improve business opportunities. Further, we plan to file patent applications, as we consider appropriate under the circumstances, to protect new technologies that we develop. Our patent filing strategy generally includes seeking patent protection in the United States, the European Union and in additional countries where we believe such protection is likely to be useful, including one or more of Australia, Brazil, Canada, China, Hong Kong, India, Israel, Japan, Mexico, Russia, Singapore, and South Korea.

Our current patent estate, on a worldwide basis, includes 119 granted or pending patent applications spread over 22 patent families with 12 granted U.S. patents, 22 pending U.S. applications, five pending international patent applications filed under the Patent Cooperation Treaty and 80 pending or granted patents that have entered the national phase of prosecution in countries outside the United States. The term of individual patents depends upon the laws of the countries in which they are obtained. In the countries in which we currently file, the patent term is 20 years from the earliest date of filing of a non-provisional patent application which serves as a priority application. However, the term of a U.S. patent may be extended to compensate for the time required to obtain regulatory approval to sell a drug (a patent term extension) or by delays encountered during patent prosecution that are caused by the USPTO (referred to as patent term restoration). For example, the Hatch-Waxman Act permits a patent term extension for FDA-approved drugs of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review and diligence during the review process. Patent term extensions cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent covering an approved drug or its method of use may be extended. A similar kind of patent extension, referred to as a Supplementary Protection Certificate, is available in Europe. Legal frameworks are also available in certain other jurisdictions to extend the term of a patent. We currently intend to seek patent term extensions on any of our issued patents in any jurisdiction where we have a qualifying patent and the extension is available; however there is no guarantee that the applicable regulatory authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions. Further, even if our patent is extended, the patent, including the extended portion of the patent, may be held invalid or unenforceable by a court of final jurisdiction in the United States or a foreign country.

Our current issued patents covering our present clinical candidates trilaciclib and G1T38 will expire in 2031, exclusive of any patent term extension, and patent applications covering our clinical candidate G1T48 will expire in 2036, if issued and exclusive of any patent term extension. Our pending applications on additional methods of use of our clinical candidates, should they issue, will expire on dates ranging from 2034 to 2037. In addition, we plan to file additional applications on aspects of our innovations that may have patent terms that extend beyond these dates. However, any of our patents, including patents that we may rely on to protect our market for approved drugs, may be held invalid or unenforceable by a court of final jurisdiction. Alternatively, we may decide that it is in our interest to settle a litigation in a manner that affects the term or enforceability of our patent. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish our ability to protect our inventions and enforce our intellectual property rights. Accordingly, we cannot predict the breadth or enforceability of claims that have been or may be granted in our patents or in third-party patents. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Our ability to obtain and maintain our proprietary position for our CDK4/6 inhibitors and technology will depend on our success in enforcing the claims that have been granted or may grant. We do not know whether any of the pending patent applications that we have filed or may file or license from third parties will result in the issuance of any additional patents. The issued patents that we own or may receive in the future may be challenged, invalidated, or circumvented, and the rights granted under any issued patents may not provide us with sufficient protection or competitive

advantages against competitors with similar technology. Furthermore, our competitors may be able to independently develop and commercialize drugs with similar mechanisms of action and duplicate our methods of treatments or strategies without infringing our patents. Because of the extensive time required for clinical development and regulatory review of a drug we may develop, it is possible that, before any of our drugs can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent.

***Trilaciclib and G1T38 patent coverage***

We own two issued U.S. Patents (U.S. 8,598,186; U.S. 8,598,197) and one pending U.S. application covering the trilaciclib compositions-of-matter and its pharmaceutical composition.

We also own two issued U.S. Patents (U.S. 8,598,197 and U.S. 9,481,691) and one U.S. application covering the G1T38 composition-of-matter and pharmaceutical composition. We own corresponding issued patents covering trilaciclib and G1T38 and their pharmaceutical compositions in Europe, Japan, Mexico, China, Australia and Singapore.

There are additional pending applications covering these compounds and compositions in Brazil, Canada, Israel, India, Japan, South Korea, Mexico and Russia. The expected year of expiration for these composition-of-matter patents, where issued, valid and enforceable, is 2031, without regard to any extensions or restorations of term that may be available under national law.

In addition, we own an issued U.S. Patent (U.S. 9,487,530) and one pending U.S. application covering the use of trilaciclib to reduce the effect of chemotherapy on healthy cells in a subject being treated for CDK4/6 replication independent cancer. This patent family covers, for example, SCLC treatment protocols involving chemotherapeutic agents carboplatin, etoposide, and/or topotecan along with trilaciclib for protection of healthy replicating cells like hematopoietic stem and progenitor cells. The patent filing also covers chemoprotection of healthy replicating cells with trilaciclib during the treatment of RB-negative breast cancer. This patent filing is also pending in Europe, Canada, China, Hong Kong and Japan. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2034, without regard to any extensions or restorations of term that may be available under national law.

We also own a U.S. application and an international application filed under the Patent Cooperation Treaty that covers dosage formulations of trilaciclib for the protection of hematopoietic stem and progenitor cells during chemotherapy. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2036, without regard to any extensions or restorations of term that may be available under national law.

We have filed a patent application that covers the administration of trilaciclib in combination with a PD-L1 inhibitor such as Tecentriq. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2037, without regard to any extensions or restorations of term that may be available under national law.

We in addition own an international application filed under the Patent Cooperation Treaty that is directed to the treatment of RB-negative tumors with the administration of a topoisomerase inhibitor in combination with trilaciclib, to protect hematopoietic stem and progenitor cells during chemotherapeutic treatment. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2035, without regard to any extensions or restorations of term that may be available under national law.

We own two patent families that are directed to the use of G1T38 to treat RB-positive tumors. The first family includes an issued U.S. Patent (U.S. 9,527,857) and one pending U.S. application directed to the treatment of RB-positive cancers with G1T38. The issued patent covers the use of G1T38, to treat RB-positive breast cancer,



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colon cancer, ovarian cancer, NSCL cancer, prostate cancer, and glioblastoma. This patent filing is also pending in Europe, Canada, China, Hong Kong and Japan. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2034, without regard to any extensions or restorations of term that may be available under national law. The second family includes an international application filed under the Patent Cooperation Treaty that is directed to the treatment of RB-positive cancers with G1T38 with additional active agents. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2035, without regard to any extensions or restorations of term that may be available under national law.

We own a patent family directed to the use of G1T38 as an anti-neoplastic agent against a T or B cell cancer. This patent filing is also pending in Europe, Canada, China, Hong Kong and Japan. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2034, without regard to any extensions or restorations of term that may be available under national law.

We have filed a patent application that covers the administration of G1T38 in combination with an EGFR inhibitor. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2038, without regard to any extensions or restorations of term that may be available under national law.

### **G1T48 Patent Coverage**

We have exclusively licensed from UIC two international applications filed under the Patent Cooperation Treaty and two U.S. pending applications that cover G1T48 and related compounds and their pharmaceutical compositions and use as selective estrogen receptor down-regulators. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2036, without regard to any extensions or restorations of term that may be available under national law.

We co-own, along with UIC, one U.S. patent application directed to the combination of G1T48 and related compounds with G1T38 and related compounds for the treatment of estrogen-modulated disorders such as RB-positive breast cancer. In addition, we have exclusively licensed UIC's rights in this co-owned application. The expected year of expiration for this patent family, where issued, valid and enforceable, is 2037, without regard to any extensions or restorations of term that may be available under national law.

A number of our pending patent applications covering certain aspects of using our current clinical candidates have not yet issued. As with other biotechnology and pharmaceutical companies, our ability to obtain and maintain a proprietary position on our drug candidates and technologies will depend on our success in obtaining effective patent claims on these pending patents and enforcing those claims if granted. However, our pending patent applications, and any patent applications that we may in the future file or license from third parties, may not result in the issuance of patents. We also cannot predict the breadth of claims that may be allowed or enforced in our patents.

Any issued patents that we have received or may receive in the future may be challenged, invalidated or circumvented. In addition, because of the extensive time required for clinical development and regulatory review of a drug candidate we may develop, it is possible that, before any of our drug candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby limiting protection such patent would afford the respective product and any competitive advantage such patent may provide. Moreover, even our issued patents do not guarantee us the right to practice our technology in relation to the commercialization of our clinical candidates. The area of patent and other intellectual property rights in pharmaceuticals is an evolving one with many risks and uncertainties, and third parties may have blocking patents that could be used to prevent us from commercializing our clinical candidates.

### ***Exclusive license for G1T48***

In November 2016, we entered into a license agreement with the University of Illinois, or UIC, pursuant to which we obtained an exclusive, worldwide license to make, have made, use, import, sell and offer for sale of certain SERDs, including G1T48, covered by patent rights owned UIC. The rights licensed to us are for all fields of use.

Under the terms of the agreement we paid a one-time only, non-refundable upfront fee of \$500,000, and we are required to pay UIC low single-digit royalties on all net sales of products and a share of any sublicensing revenues. We are also obligated to pay annual maintenance fees, which are fully creditable against any royalty payments made by us. We may also be required to pay UIC milestone payments of up to an aggregate of \$2.625 million related to the initiation and execution of clinical trials and first commercial sale of a product in multiple countries. We are responsible for all future patent prosecution costs.

The term of the license agreement will continue on a country-by-country basis until the later of (i) the expiration of the last valid claim within the patent rights covering the product in such country, (ii) the expiration of market exclusivity in such country and (iii) the 10<sup>th</sup> anniversary of the first commercial sale in such country. UIC may terminate the agreement in the event (i) we fail to pay any amount or make any report when required to be made and fail to cure such failure within 30 days after receipt of notice, (ii) we are in breach of any provision of the agreement and fail to remedy such breach within 45 days after receipt of notice, (iii) we make a report to UIC under the agreement that is determined to be materially false, (iv) we declare insolvency or bankruptcy or (v) we take any action that causes patent rights or technical information to be subject to any lien or encumbrance and fail to remedy within 45 days of receipt of notice. We may terminate the agreement at any time upon at least 90 days' written notice. Upon expiration or termination of the agreement, all rights revert to UIC.

### ***Trade secrets***

In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees, and consultants, and invention assignment agreements with our employees. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our commercial partners, collaborators, employees, and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

## **Government regulation and product approval**

### ***FDA approval process***

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act, or the FDC Act, and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending new drug applications, or NDAs, warning letters, voluntary product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

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Pharmaceutical product development in the United States typically involves the performance of nonclinical laboratory and animal tests, the submission to the FDA of an investigational new drug application, or IND, which must become effective before clinical testing may commence, and adequate, well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity, and novelty of the product or disease.

Preclinical tests include laboratory evaluation of product chemistry, formulation, and toxicity, as well as animal studies to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical and other nonclinical tests must comply with certain federal regulations and requirements, including good laboratory practices. The results of preclinical testing are submitted to the FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long term nonclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal regulations, including those encompassing good clinical practice, or GCP, requirements that are meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, investigators, and monitors, and (ii) under protocols detailing the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time by imposing a clinical hold or impose other sanctions if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. The clinical trial protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board, or IRB, at each site where a clinical trial will be performed for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements or it may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence on effectiveness. Phase 2 usually involves clinical trials in a limited patient population to determine the effectiveness of the drug for a particular indication, dosage tolerance, and optimum dosage, and to identify common adverse effects and safety risks. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 clinical trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit the FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug. In most cases, the FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug. A single Phase 3 clinical trial with other confirmatory evidence may be sufficient in rare instances where the clinical trial is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity, or prevention of a disease with potentially serious outcome, and confirmation of the result in a second clinical trial would be practically or ethically impossible.

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After completion of the required clinical testing, an NDA is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the United States. The NDA must include the results of all nonclinical, clinical, and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA is substantial. Under federal law, the submission of most NDAs is additionally subject to a substantial application user fee, currently \$2,038,100 for an NDA with clinical information, and the manufacturer and/or sponsor under an approved NDA is also subject to annual product and establishment user fees, currently \$97,750 per product and \$512,200 per establishment. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of NDAs. The FDA seeks to review applications for standard review drug products within ten months, and applications for priority review drugs within six months. Priority review can be applied to drugs intended to treat a serious condition and that the FDA determines offer major advances in treatment, or provide a treatment where no adequate therapy exists. The review process for both standard and priority review may be extended by FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

The FDA may also refer applications for novel drug products, or drug products that present difficult questions of safety or efficacy, to an advisory committee, which is typically a panel that includes clinicians and other experts, for review, evaluation, and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. The FDA will not approve the product unless compliance with current good manufacturing practice, or cGMP, requirements is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. As a condition of NDA approval, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for health care professionals, and elements to assure safe and effective use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory requirements is not maintained or problems are identified following initial marketing.

**Disclosure of clinical trial information**

Sponsors of clinical trials of certain FDA-regulated products, including prescription drugs, are required to register and disclose certain clinical trial information on a public website maintained by the U.S. National Institutes of Health. Information related to the product, patient population, phase of investigation, clinical trial sites and investigator, and other aspects of the clinical trial is made public as part of the registration. Sponsors are also obligated to disclose the results of these clinical trials after completion if the product candidate is ultimately approved, and disclosure of the results of these clinical trials will be delayed until such approval. Competitors may use this publicly-available information to gain knowledge regarding the design and progress of our development programs.

**The Hatch-Waxman act**

*Orange book listing*

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application, or ANDA. An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. Other than the requirement for bioequivalence testing, ANDA applicants are not required to conduct, or submit results of, nonclinical or clinical tests to prove the safety or effectiveness of their drug product. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that: (i) the required patent information has not been filed; (ii) the listed patent has expired; (iii) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the new product. The ANDA applicant may also elect to submit a section viii statement, certifying that its proposed ANDA label does not contain or carve out any language regarding the patented method-of-use, rather than certify to a listed method-of-use patent.

If the applicant does not challenge the listed patents, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired. A certification that the new product will not infringe the already approved product's listed patents, or that such patents are invalid, is called a Paragraph IV certification. If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA applicant.

The ANDA application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the referenced product has expired.

*Exclusivity*

Upon NDA approval of a new chemical entity or NCE, which is a drug that contains no active moiety that has been approved by the FDA in any other NDA, that drug receives five years of marketing exclusivity during which time the FDA cannot receive any ANDA seeking approval of a generic version of that drug. Certain changes to a drug, such as the addition of a new indication to the package insert, are associated with a three-year period of exclusivity during which the FDA cannot approve an ANDA for a generic drug that includes the change.

An ANDA may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed. If there is no listed patent in the Orange Book, there may not be a Paragraph IV certification, and, thus, no ANDA may be filed before the expiration of the exclusivity period.

*Patent term extension*

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent term extension. The allowable patent term extension is calculated as half of the drug's testing phase—the time between when the IND becomes effective and NDA submission—and all of the review phase—the time between NDA submission and approval up to a maximum of five years. The time can be shortened if FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years.

For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to four times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the PTO must determine that approval of the drug covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for a drug for which an NDA has not been submitted.

**Advertising and promotion**

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. Changes to some of the conditions established in an approved application, including changes in indications, labeling, or certain manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

**Adverse event reporting and cGMP compliance**

Adverse event reporting and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, REMS, and surveillance to monitor the effects of an approved product, or the FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality-control, drug manufacture, packaging, and labeling procedures, among other things, must continue to conform to cGMP after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration with the FDA subjects entities to periodic unannounced inspections by the FDA, during which the agency inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers

must continue to expend time, money and effort in the areas of production and quality-control to maintain compliance with cGMP. Regulatory authorities may impose a range of enforcement actions, including bringing a seizure and injunction in court, withdraw product approvals or request voluntary product recalls if a company fails to comply with cGMP requirements.

***Pediatric information***

Under the Pediatric Research Equity Act, or PREA, NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The sponsor must submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-phase 2 meeting or as may be agreed between the sponsor and the FDA. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from nonclinical studies, early phase clinical trials, and/or other clinical development programs. The FDA may grant full or partial waivers, or deferrals, for submission of data.

The Best Pharmaceuticals for Children Act, or BPCA, provides NDA holders a six-month extension of any exclusivity—patent or non-patent—for a drug if certain conditions are met, including satisfaction of a pediatric trial as described above. Conditions for exclusivity include the FDA's determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, the FDA making a written request for pediatric clinical trials, and the applicant agreeing to perform, and reporting on, the requested clinical trials within the statutory timeframe. Applications under the BPCA are treated as priority applications, with all of the benefits that designation confers.

***Special protocol assessment***

A company may reach an agreement with FDA under the Special Protocol Assessment, or SPA, process as to the required design and size of clinical trials intended to form the primary basis of an efficacy claim. Under the FDC Act and FDA guidance implementing the statutory requirement, an SPA is generally binding upon the FDA except in limited circumstances, such as if the FDA identifies a substantial scientific issue essential to determining safety or efficacy after the clinical trial begins, public health concerns emerge that were unrecognized at the time of the protocol assessment, the sponsor and FDA agree to the change in writing, or if the clinical trial sponsor fails to follow the protocol that was agreed upon with the FDA.

***Expedited review and approval***

The FDA has various programs, including Fast Track, priority review, accelerated approval and breakthrough designation which are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis of surrogate endpoints. Even if a drug qualifies for one or more of these programs, the FDA may later decide that the drug no longer meets the conditions for qualification or that the time period for FDA review or approval will not be shortened. Generally, drugs that may be eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that offer meaningful benefits over existing treatments. For example, Fast Track is a process designed to facilitate the development, and expedite the review, of drugs to treat serious diseases and fill an unmet medical

need. The request may be made at the time of IND submission and generally no later than the pre-NDA meeting. The FDA will respond within 60 calendar days of receipt of the request. Priority review, which is requested at the time of NDA submission, is designed to give drugs that offer major advances in treatment or provide a treatment where no adequate therapy exists an initial review within six months as compared to a standard review time of ten months. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Accelerated approval provides an earlier approval of drugs to treat serious diseases, and that fill an unmet medical need based on a surrogate endpoint, which is a laboratory measurement or physical sign used as an indirect or substitute measurement representing a clinically meaningful outcome. Discussions with the FDA about the feasibility of an accelerated approval typically begin early in the development of the drug in order to identify, among other things, an appropriate endpoint. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials to confirm the appropriateness of the surrogate marker clinical trial.

Another expedited program is that for Breakthrough Therapy. A Breakthrough Therapy designation is designed to expedite the development and review of drugs that are intended to treat a serious condition where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapy on a clinically significant endpoint(s). A sponsor may request Breakthrough Therapy designation at the time that the IND is submitted, or no later than at the end-of-Phase 2 meeting. The FDA will respond to a Breakthrough Therapy designation request within sixty days of receipt of the request. A drug that receives Breakthrough Therapy designation is eligible for all fast track designation features, intensive guidance on an efficient drug development program, beginning as early as Phase 1 and commitment from the FDA involving senior managers.

#### **Regulation of companion diagnostic devices**

If we decide that a diagnostic test would provide useful information for patient selection or if the FDA requires us to develop such a test, we may work with a collaborator to develop an *in vitro* diagnostic, or companion test. The FDA regulates *in vitro* diagnostic tests as medical devices, and the type of regulation to which such a test will be subjected will depend, in part, on a risk assessment by the FDA as well as a determination of whether the test is intended to yield results that would be helpful to know versus one that the FDA or we believe is necessary to know for the safe and effective use of our drugs under development.

The FDA issued Guidance on In-Vitro Companion Diagnostic Devices in August 2014, which is intended to assist companies developing *in vitro* companion diagnostic devices and companies developing therapeutic products that depend on the use of a specific *in vitro* companion diagnostic for the safe and effective use of the product. The FDA defined an *in vitro* companion diagnostic device, or IVD companion diagnostic device, as a device that provides information that is essential for the safe and effective use of a corresponding therapeutic product. The use of an IVD companion diagnostic device with a therapeutic product will be stipulated in the instructions for use in the labeling of both the diagnostic device and the corresponding therapeutic product, including the labeling of any generic equivalents of the therapeutic product. The FDA expects that the therapeutic product sponsor will address the need for an approved or cleared IVD companion diagnostic device in its therapeutic product development plan and that, in most cases, the therapeutic product and its corresponding companion diagnostic will be developed contemporaneously.

#### **Europe/Rest of world government regulation**

In addition to regulations in the United States, we are and will be subject, either directly or through our distribution partners, to a variety of regulations in other jurisdictions governing, among other things, clinical trials and commercial sales and distribution of our products, if approved.



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Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in non-U.S. countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a process that requires the submission of a clinical trial application much like an IND prior to the commencement of human clinical trials. In Europe, for example, a clinical trial application, or CTA, must be submitted to the competent national health authority and to independent ethics committees in each country in which a company plans to conduct clinical trials. Once the CTA is approved in accordance with a country's requirements, clinical trials may proceed in that country.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country, even though there is already some degree of legal harmonization in the European Union member states resulting from the national implementation of underlying E.U. legislation. In all cases, the clinical trials are conducted in accordance with GCP and other applicable regulatory requirements.

To obtain regulatory approval of a new drug, or medicinal product in the European Union a sponsor must obtain approval of a marketing authorization application. The way in which a medicinal product can be approved in the European Union depends on the nature of the medicinal product

The centralized procedure results in a single marketing authorization granted by the European Commission that is valid across the European Union, as well as in Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for human drugs that are: (i) derived from biotechnology processes, such as genetic engineering, (ii) contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative diseases, autoimmune and other immune dysfunctions and viral diseases, (iii) officially designated "orphan drugs" (drugs used for rare human diseases) and (iv) advanced-therapy medicines, such as gene-therapy, somatic cell-therapy or tissue-engineered medicines. The centralized procedure may at the request of the applicant also be used for human drugs which do not fall within the above mentioned categories if the human drug (a) contains a new active substance which was not authorized in the European Community; or (b) the applicant shows that the medicinal product constitutes a significant therapeutic, scientific or technical innovation or that the granting of authorization in the centralized procedure is in the interests of patients or animal health at the European Community level.

Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of a marketing authorization application by the EMA is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the Committee for Medicinal Products for Human Use, or CHMP), with adoption of the actual marketing authorization by the European Commission thereafter. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest from the point of view of therapeutic innovation, defined by three cumulative criteria: the seriousness of the disease to be treated; the absence of an appropriate alternative therapeutic approach, and anticipation of exceptional high therapeutic benefit. In this circumstance, EMA ensures that the evaluation for the opinion of the CHMP is completed within 150 days and the opinion issued thereafter.

The mutual recognition procedure, or MRP, for the approval of human drugs is an alternative approach to facilitate individual national marketing authorizations within the European Union. Basically, the MRP may be applied for all human drugs for which the centralized procedure is not obligatory. The MRP is applicable to the majority of conventional medicinal products, and is based on the principle of recognition of an already existing national marketing authorization by one or more member states.

The characteristic of the MRP is that the procedure builds on an already existing marketing authorization in a member state of the E.U. that is used as reference in order to obtain marketing authorizations in other E.U.

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member states. In the MRP, a marketing authorization for a drug already exists in one or more member states of the E.U. and subsequently marketing authorization applications are made in other European Union member states by referring to the initial marketing authorization. The member state in which the marketing authorization was first granted will then act as the reference member state. The member states where the marketing authorization is subsequently applied for act as concerned member states.

The MRP is based on the principle of the mutual recognition by European Union member states of their respective national marketing authorizations. Based on a marketing authorization in the reference member state, the applicant may apply for marketing authorizations in other member states. In such case, the reference member state shall update its existing assessment report about the drug in 90 days. After the assessment is completed, copies of the report are sent to all member states, together with the approved summary of product characteristics, labeling and package leaflet. The concerned member states then have 90 days to recognize the decision of the reference member state and the summary of product characteristics, labeling and package leaflet. National marketing authorizations shall be granted within 30 days after acknowledgement of the agreement.

Should any Member State refuse to recognize the marketing authorization by the reference member state, on the grounds of potential serious risk to public health, the issue will be referred to a coordination group. Within a timeframe of 60 days, member states shall, within the coordination group, make all efforts to reach a consensus. If this fails, the procedure is submitted to an EMA scientific committee for arbitration. The opinion of this EMA Committee is then forwarded to the Commission, for the start of the decision making process. As in the centralized procedure, this process entails consulting various European Commission Directorates General and the Standing Committee on Human Medicinal Products or Veterinary Medicinal Products, as appropriate.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the other applicable regulatory requirements.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension of clinical trials, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

## **Employees**

As of February 1, 2017, we had 30 full-time employees and one part-time employee, including 21 in research and development, four in manufacturing, operations, and quality assurance, and six in general and administrative functions. We have no collective bargaining agreements with our employees, and we have not experienced any work stoppages. We consider our relations with our employees to be good.

## **Facilities**

Our corporate headquarters is located in Research Triangle Park, North Carolina, where we lease approximately 9,766 square feet of laboratory and office space. Our lease on our corporate headquarters expires on December 31, 2022. We believe our facilities are adequate for our current needs and that suitable additional substitute space would be available if needed.

## **Legal Proceedings**

We are not currently subject to any material pending legal proceedings.

## Management

### Executive officers and directors

The following table provides information regarding our executive officers and directors as of January 31, 2017:

Name	Age	Position
<b>Executive Officers:</b>		
Mark A. Velleca, M.D., Ph.D.	53	Chief Executive Officer, President and Director
Rajesh K. Malik, M.D.	58	Chief Medical Officer
Gregory J. Mossinghoff	55	Chief Business Officer and Secretary
Jay Strum, Ph.D.	53	Chief Scientific Officer
Jennifer K. Moses	42	Vice President of Finance and Administration
<b>Non-Employee Directors:</b>		
Seth A. Rudnick, M.D.	68	Chairman of the Board of Directors
Fredric N. Eshelman, Pharm.D.	68	Director
Peter Kolchinsky, Ph.D.	40	Director
Glenn P. Muir	57	Director
Christy L. Shaffer, Ph.D.	58	Director
Timothy E. Sullivan	46	Director
Michael Gutch	50	Director

#### **Executive officers**

**Mark A. Velleca, M.D., Ph.D.**, has served as our Chief Executive Officer, President and a member of our board of directors since May 2014. Prior to joining us, Dr. Velleca was a co-founder and served as Senior Vice President of CGI Pharmaceuticals, Inc., or CGI, a biopharmaceutical company, from 1999 to 2010, where he managed the company from its inception through clinical trials of multiple drug candidates. After CGI was acquired by Gilead Sciences, Inc., or Gilead, a biotechnology company, in 2010, Dr. Velleca served as a Senior Advisor to Gilead from 2010 to April 2012, where he worked to help build its oncology pipeline. Dr. Velleca has served on the board of directors of BioMarker Strategies, a private oncology diagnostics company, from 2010 to 2012, and on the scientific advisory boards of BioRelix Inc., a biopharmaceutical company, from 2007 to 2012 and Intellikine, Inc., a biopharmaceutical company, from 2007 to 2010. Dr. Velleca most recently served as Executive Vice President at The Leukemia & Lymphoma Society from April 2012 to April 2014. Dr. Velleca also served as an attending physician at Yale New Haven Hospital and on the faculty of the Yale University School of Medicine. Dr. Velleca received his B.S. from Yale University, and his M.D. and Ph.D. from Washington University in St. Louis. We believe that Dr. Velleca's perspective and experience as our Chief Executive Officer and President, as well as his depth of experience in the biotechnology industry, provide him with the qualifications and skills to serve on our board of directors.

**Rajesh K. Malik, M.D.**, has served as our Chief Medical Officer since July 2014. He has over 20 years of experience in all phases of drug development in the pharmaceutical and biotechnology industry and academic

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medicine, with a focus in oncology. Prior to becoming our Chief Medical Officer, Dr. Malik served as a consultant for business, clinical and regulatory matters from May 2013 through July 2014, including as a consultant to our Company from July 2013 to June 2014. Prior to joining us, Dr. Malik served as Chief Medical Officer of Agennix AG, a German biotechnology company, from January 2007 to September 2013, and as a member of the management board of Agennix AG from November 2009 to September 2013. Dr. Malik also served as Chief Medical Officer of Adherex Technologies, Inc., a biopharmaceutical company, from September 2004 to January 2007. Dr. Malik also served as an attending physician at University of Virginia Medical Center and on the faculty of the University of Virginia School of Medicine. Dr. Malik received his M.B. and Ch.B. from the University of Sheffield Medical School.

**Gregory J. Mossinghoff** has served as our Chief Business Officer and Secretary since February 2015 and provided financial management, strategic planning and business development consulting services to our Company from June 2014 through January 2015. He has more than 20 years of experience in strategic planning, technology valuation, partnering, capital markets and fundraising. Mr. Mossinghoff served as Executive Vice President, Chief Business Officer of Zoion Pharma, Inc. from August 2010 to January 2015 and as a member of the board of directors of Zoion Pharma, Inc., since August 2010. Zoion Pharma, Inc. develops drugs for veterinary disorders such as canine keratoconjunctivitis. In addition to his work as a consultant in the biopharmaceutical industry from 2005 to 2014, Mr. Mossinghoff served as Co-Founder, President and Chief Executive Officer of NovoLipid, Inc., an oncology drug discovery company, from 2010 to December 2013; Co-Founder, President and Chief Executive Officer and a member of the board of directors of Integrated Oncology Solutions, Inc., an endocrine receptor oncology drug discovery and development company, from 2006 to 2010; and President, Chief Business Officer and a member of the board of directors of Inspire Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, from 1998 to 2005, which was subsequently acquired by Merck & Co., Inc. in 2011. Mr. Mossinghoff received his B.A. from the University of Virginia and his M.B.A. from George Mason University.

**Jay Strum, Ph.D.**, has served as our Chief Scientific Officer since 2009, and in addition to this role, served as our President and a member of our board of directors from 2011 until 2014. Prior to joining us, Dr. Strum served as a scientist, manager and then Director of the Genomics Division at GlaxoSmithKline plc, or GSK, a British pharmaceutical company, from May 1995 to February 2009, where he developed drugs in multiple therapeutic areas and target classes with a focus on kinases. In his role as a manager at GSK, Dr. Strum served as a program leader of interdisciplinary research and development teams in early drug discovery in metabolic diseases and oncology, and he contributed to the discovery of numerous drug candidates and the development of three approved drugs, including TYKERB. As the Director of the Genomics Division at GSK, he led the creation and operation of an international department responsible for supporting genomics research in all therapeutic areas within GSK. Dr. Strum is the author of more than 40 scientific publications and co-inventor of all intellectual property owned by the Company that cover trilaciclib and G1T38 or their method of use, which consists of 17 patent families with 11 issued U.S. patents. Dr. Strum is a co-inventor of more than 75 applications that have entered the national phase of prosecution in countries outside the United States. Dr. Strum received his B.S. and B.A. from Western Carolina University and his Ph.D. in biochemistry from Wake Forest University.

**Jennifer K. Moses** has served as our Vice President of Finance and Administration since March 2015 and provided financial consulting services to our Company from October 2012 through February 2015. From October 2007 through February 2015, Ms. Moses was a partner of RankinMcKenzie, LLC, a professional finance and accounting services firm, and provided financial services to private companies. Previously, she was a senior manager in the tax services group at Deloitte LLP, where she served clients ranging from small, emerging growth companies to large, publicly traded companies. Ms. Moses received her B.S. from Pennsylvania State University and is a certified public accountant.

**Non-employee directors**

**Seth A. Rudnick, M.D.**, has served as Chairman of our board of directors since May 2014 and as the Executive Chairman of our board of directors from January 2014 to May 2014. Dr. Rudnick also serves as a member of the boards of directors of several life sciences companies, including Pozen Inc., a publicly traded pharmaceutical company, and Liquidia Technologies, Inc., a privately held biotechnology company, for which he serves as Chairman of the board of directors. From 2012 until October 2015, he served as a member of the board of directors of Square 1 Financial Inc., a financial services company that was publicly traded until October 2015, and previously served on the boards of directors of more than a dozen other privately held biotechnology companies. From 1999 to December 2013, when he retired, Dr. Rudnick was a general partner at Canaan Partners, a venture capital firm that invests in companies in the technology and healthcare sectors. From 1986 to 1991, he was head of research and development at Johnson & Johnson's biotechnology company, Ortho Biotech, and from 1982 to 1986, Dr. Rudnick was head of pharmaceutical development at Biogen N.V. Dr. Rudnick received a B.A. from the University of Pennsylvania and an M.D. from the University of Virginia. We believe that Dr. Rudnick is qualified to serve as the Chairman of our board of directors based on his experience in the life sciences, biotechnology and pharmaceutical industries and for his knowledge of corporate development matters.

**Fredric N. Eshelman, Pharm.D.**, has served as a member of our board of directors since February 2015. Dr. Eshelman founded Eshelman Ventures, LLC in March 2014, which invests in a variety of companies, primarily in the healthcare sector, and has served as a principal since its founding. Dr. Eshelman has served as the Chairman of the board of directors of The Medicines Company, a publicly traded biopharmaceutical company, since 2015 and has been a member of the board of Valeant Pharmaceuticals International, Inc. since 2016. Dr. Eshelman previously served on the board of directors of Furiex Pharmaceuticals, a publicly traded biopharmaceutical company, from 2010 until July 2014, when it was sold to Forest Labs/Actavis, and of Pharmaceutical Product Development, Inc., a contract research organization that was publicly traded until 2011, from 1986 until 2011. Dr. Eshelman also served as Chief Executive Officer for Pharmaceutical Product Development, Inc., a biopharmaceutical company, from June 1990 to December 2011, as Senior Vice President, Development and a member of the board of directors of the former Glaxo Inc., a pharmaceutical company, from 1989 to 1990. He also serves on the boards of directors of a number of privately held biopharmaceutical companies. Dr. Eshelman also served on the executive committee of the Medical Foundation of North Carolina, the board of the North Carolina Biotechnology Center, and the Board of Trustees for the University of North Carolina—Wilmington. In addition, Dr. Eshelman serves as an adjunct professor at the University of North Carolina—Chapel Hill School of Pharmacy, where he chairs the Board of Visitors. Dr. Eshelman received his B.S. in pharmacy from the University of North Carolina—Chapel Hill, and a Pharm.D. from the University of Cincinnati. We believe that Dr. Eshelman is qualified to serve as a member of our board of directors based on his experience in the life sciences, biotechnology and pharmaceutical industries and for his knowledge of corporate development matters.

**Peter Kolchinsky, Ph.D.**, has served as a member of our board of directors since February 2015. Dr. Kolchinsky is a founder, Managing Director and Portfolio Manager of RA Capital Management, LLC, a crossover investment manager dedicated to evidence-based investing in healthcare and life science companies, where he has worked since January 2002. RA Capital Management, LLC is the general partner of RA Capital Healthcare Fund, L.P. and RA Capital Healthcare International Fund, Ltd. Dr. Kolchinsky serves as a member of the board of directors of two publicly traded biopharmaceutical companies, Dicerna Pharmaceuticals, Inc. and Wave Life Sciences Ltd., as well as a number of privately held companies. Dr. Kolchinsky served on the Board of Global Science and Technology for the National Academics of Sciences from 2009 to 2012. Dr. Kolchinsky earned a B.A. from Cornell University and a Ph.D. in virology from Harvard University. We believe Dr. Kolchinsky is qualified to serve on our board of directors because of his business experience, including his experience as a venture capitalist and his experience serving on the boards of directors of various healthcare and life science companies.

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**Glenn P. Muir** has served as a member of our board of directors since September 2015. Mr. Muir also has served as a member of the board of directors of two publicly traded life science and medical device companies, Repligen Corporation since September 2015 and ReWalk Robotics Ltd. since July 2014, as well as privately held biotechnology company, RainDance Technologies, Inc. since August 2014. From September 2000 until May 2014, when he retired, Mr. Muir served as Executive Vice President, Finance and Administration of Hologic, Inc., or Hologic, a publicly traded manufacturer and supplier of medical products, and was Hologic's Chief Financial Officer from 1992 until his May 2014 retirement. Mr. Muir served as the Controller of Hologic from October 1988 to 1992, including during its initial public offering in 1990. Mr. Muir served as a director of Hologic from 2001 through August 2013. Mr. Muir holds a B.B.A. with a major in accounting from the University of Massachusetts Amherst, an M.B.A. from the Harvard Graduate School of Business Administration and an M.Sc. in taxation from Bentley College Graduate School of Business. Mr. Muir is also a certified public accountant. We believe that Mr. Muir is qualified to serve as a member of our board of directors based on his experience in the life sciences, biotechnology and pharmaceutical industries and for his knowledge of financial and corporate development matters.

**Christy L. Shaffer, Ph.D.**, has served as a member of our board of directors since August 2012, and from 2012 until 2014, Dr. Shaffer served as the Executive Chairperson of our board of directors. Dr. Shaffer was the Chief Executive Officer and President of Inspire Pharmaceuticals, Inc., or Inspire, until her retirement in February 2010. Inspire is a biopharmaceutical company that was acquired by Merck & Co., Inc. in 2011. Following her retirement, Dr. Shaffer served as a consultant to Inspire until February 2012. From August 2011 to August 2015, Dr. Shaffer served as a Venture Partner of Hatteras Venture Partners, a venture capital firm with a focus on biopharmaceuticals and related opportunities in human medicine, and as a Managing Director of Hatteras Discovery, which is a part of Hatteras Venture Partners. Since August 2015, Dr. Shaffer has served as a General Partner of Hatteras Venture Partners. Dr. Shaffer has served as a member of the board of directors of privately held life sciences companies, including Artizan Biosciences, Inc., Spyryx Biosciences, Inc., Trefoil Therapeutics, Inc., KinoDyn Inc., for which she serves as Chairperson of the board of directors, and GrayBug, Inc., for which she serves as Chairperson of the board of directors. In September 2008, the Securities and Exchange Commission approved a non-monetary settlement of its investigation relating to Inspire's disclosures in its periodic reports relating to a clinical trial. The Securities and Exchange Commission also approved a settlement with Dr. Shaffer, as Inspire's President and Chief Executive Officer and a member of its board of directors, under which she consented to a cease and desist order against future violations of Section 13(a) of the Exchange Act and Rules 12b-20 and 13a-13 thereunder. The cease and desist order followed a finding by the Securities and Exchange Commission that three Quarterly Reports on Form 10-Q filed by Inspire included misleading disclosure about a clinical trial, specifically that the trial was described as "confirmatory" and "replicating" the efficacy found in an earlier trial. Dr. Shaffer did not admit or deny any findings in the order, and the order did not include any finding of any violation of any statute or regulation that involved any intentional wrongdoing or fraud, any monetary payments or other sanctions or otherwise affect Dr. Shaffer's future employment status, nor did it prohibit Dr. Shaffer from serving in any capacity on public company boards of directors. Dr. Shaffer received her Ph.D. in Pharmacology from the University of Tennessee Health Science Center. We believe that Dr. Shaffer is qualified to serve as a member of our board of directors based on her experience in the life sciences, biotechnology and pharmaceutical industries and for her knowledge of corporate development matters.

**Michael Gutch, Ph.D.** has served as a member of our board of directors since September 2016 and previously served as a member of our board of directors from October 2013 until February 2015. Since January 2014, Dr. Gutch has served as Executive Director of Corporate Development and Head of Equities at AstraZeneca, a global biopharmaceutical company. He previously served as the Managing Director of MedImmune, LLC, the corporate venture capital arm and a wholly-owned subsidiary of AstraZeneca, from September 2011 until December 2013 and as the Investment Director of HIG BioVentures, a division of HIG Capital from February 2008 until

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September 2011. He currently serves on the boards of directors of Albireo Pharma, Inc., a publicly traded biopharmaceutical company, and of the private companies Affinita Biotech, Inc., Entasis Therapeutics, Inc., PhaseBio Pharmaceuticals Inc. and Cerepedics, Inc. Dr. Gutch also serves on the board of directors of SouthEast Bio, a non-profit organization promoting the growth of the life sciences in the Southeastern United States. Dr. Gutch holds an MBA in Finance from Indiana University and a Ph.D. in Molecular Pathology from SUNY Stony Brook. He earned his Bachelor's degrees in Biology and Chemistry from Alfred University. We believe that Dr. Gutch is qualified to serve as a member of our board of directors based on his experience in the life sciences, biotechnology and pharmaceutical industries and for his knowledge of corporate development matters.

**Timothy E. Sullivan** has served as a member of our board of directors since May 2016. In January 2014, Mr. Sullivan joined Aju IB Investment and currently serves as Partner. Previously, he was Head of Life Sciences Investment Banking at RBS Citizens from December 2011 to January 2014 and served as Executive Vice President and Head of Corporate Development at Cornerstone Pharmaceuticals from March 2010 to December 2011. He also was an investment banker focused on life sciences at Jefferies and Bear Stearns. Mr. Sullivan was involved in financing and M&A transactions in excess of \$20 billion in capital and advisory. His previous healthcare experience also includes three years of advisory, business development and operations at Cornerstone Pharmaceuticals as well as four years managing a clinical research division within Brigham & Women's Hospital. Mr. Sullivan also currently serves as a director of Molecular Templates, Inc., a private biopharmaceutical company. Mr. Sullivan received his M.B.A. from Columbia Business School and his B.A. in Biology from Harvard College. We believe that Mr. Sullivan is qualified to serve as a member of our board of directors based on his experience in the life sciences, biotechnology and pharmaceutical industries and for his knowledge of corporate development matters.

## **Board composition**

As of January 31, 2017, our board of directors consisted of eight members, six of whom are members pursuant to the board composition provisions of our existing certificate of incorporation and Third Amended and Restated Stockholders Agreement, which agreement is described under the "Certain Relationships and Related Party Transactions" section of this prospectus. These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity, which is not only limited to race, gender or national origin. We have no formal policy regarding board diversity. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their death, resignation or removal. Our amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least % of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

## **Director independence**

Our board of directors has determined that all members of our board of directors, except , are independent directors, including for purposes of the rules of The NASDAQ Stock Market and relevant federal securities laws and regulations. There are no family relationships among any of our directors or executive officers.

### **Staggered board**

In accordance with the terms of our amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering, our board of directors will be divided into three staggered classes of directors of the same or nearly the same number and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2018 for Class I directors, 2019 for Class II directors and 2020 for Class III directors:

- our Class I directors will be \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ ;
- our Class II directors will be \_\_\_\_\_ and \_\_\_\_\_ ; and
- our Class III directors will be \_\_\_\_\_ and \_\_\_\_\_ .

Our amended and restated certificate of incorporation and amended and restated by-laws provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

### **Committees of the board of directors**

Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will have the composition and responsibilities described below upon completion of this offering. Each of the below committees will have a written charter approved by our board of directors, effective upon completion of the offering. Each of the committees will report to our board of directors as such committee deems appropriate and as our board of directors may request. Upon completion of this offering, copies of each charter will be posted on the investor relations section of our website. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

#### **Audit committee**

Effective upon completion of this offering, our audit committee will be comprised of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, with \_\_\_\_\_ serving as chairman of the committee. Our board of directors has determined that each member of the audit committee meets the independence requirements of Rule 10A-3 under the Exchange Act and the applicable NASDAQ Stock Market rules, and has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has determined that \_\_\_\_\_ is an "audit committee financial expert" within the meaning of the Securities and Exchange Commission, or SEC, regulations and the applicable rules of The NASDAQ Stock Market. The audit committee's responsibilities upon completion of this offering will include:

- selecting a firm to serve as the independent registered public accounting firm to audit our financial statements;
- ensuring the independence of the independent registered public accounting firm;



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- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and that firm, our interim and year-end operating results;
- establishing procedures for employees to anonymously submit concerns about questionable accounting or audit matters;
- considering the effectiveness of our internal controls and internal audit function;
- reviewing material related-party transactions or those that require disclosure; and
- approving or, as permitted, pre-approving all audit and non-audit services to be performed by the independent registered public accounting firm.

### ***Compensation committee***

Effective upon completion of this offering, our compensation committee is comprised of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, with \_\_\_\_\_ serving as chairman of the committee. Each member of this committee is a non-employee director, as defined by Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended. Our board of directors has determined that each member of the compensation committee is “independent” as defined in the rules of The NASDAQ Stock Market. The composition of our compensation committee meets the requirements for independence under the listing standards of The NASDAQ Stock Market, including the applicable transition rules. Our board of directors intends to cause our compensation committee to be comprised of only directors that are independent under the rules of The NASDAQ Stock Market within one year of the date of this prospectus. The compensation committee’s responsibilities upon completion of this offering will include:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- reviewing and recommending to our board of directors the terms of any compensatory agreements with our executive officers;
- administering our stock and equity incentive plans;
- reviewing and approving, or making recommendations to our board of directors with respect to, incentive compensation and equity plans; and
- reviewing all overall compensation policies and practices.

### ***Nominating and governance committee***

Effective upon completion of this offering, our nominating and governance committee will be comprised of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, with \_\_\_\_\_ as the chairman of the committee. Our board of directors has determined that each member of the nominating and corporate governance committee is “independent” as defined in the applicable rules of The NASDAQ Stock Market. The nominating and corporate governance committee’s responsibilities upon completion of this offering will include:

- identifying and recommending candidates for membership on our board of directors;
- recommending directors to serve on board committees;

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- reviewing and recommending our corporate governance guidelines and policies;
- reviewing proposed waivers of the code of conduct for directors and executive officers;
- evaluating, and overseeing the process of evaluating, the performance of our board of directors and individual directors; and
- assisting our board of directors on corporate governance matters.

### ***Leadership structure and risk oversight***

Our board of directors is currently chaired by Dr. Rudnick. As a general policy, our board of directors believes that separation of the positions of chairman and chief executive officer reinforces the independence of the board of directors from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of the board of directors as a whole. As such, Dr. Velleca serves as our President and Chief Executive Officer while Dr. Rudnick serves as our Chairman of the board of directors but is not an officer.

Our board of directors oversees the management of risks inherent in the operation of our business and the implementation of our business strategies. Our board of directors performs this oversight role by using several different levels of review. In connection with its reviews of the operations and corporate functions of our company, our board of directors addresses the primary risks associated with those operations and corporate functions. In addition, our board of directors reviews the risks associated with our company's business strategies periodically throughout the year as part of its consideration of undertaking any such business strategies.

Each of our board committees also oversees the management of our company's risk that falls within the committee's areas of responsibility. In performing this function, each committee has full access to management, as well as the ability to engage advisors. Our Chief Executive Officer reports to the audit committee and is responsible for identifying, evaluating and implementing risk management controls and methodologies to address any identified risks. In connection with its risk management role, our audit committee meets privately with representatives from our independent registered public accounting firm and our Chief Executive Officer. The audit committee oversees the operation of our risk management program, including the identification of the primary risks associated with our business and periodic updates to such risks, and reports to our board of directors regarding these activities.

### ***Compensation committee interlocks and insider participation***

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee. For a description of transactions between us and members of our compensation committee and affiliates of such members, please see the "Certain Relationships and Related Party Transactions" section.

### **Code of business conduct and ethics**

We plan to adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting, which will be effective upon completion of this offering. Upon the completion of this offering, our code of business conduct and ethics will be available on our website at [www.g1therapeutics.com](http://www.g1therapeutics.com). We intend to disclose any amendments to the code, or any waivers of its requirements, on our website or in a Current Report on Form 8-K.

## Executive and director compensation

### Summary compensation table

The following table shows the total compensation paid or accrued during the fiscal year ended December 31, 2016, to our Chief Executive Officer and President and our two next most highly compensated executive officers who earned more than \$100,000 during the fiscal year ended December 31, 2016, and were serving as executive officers as of such date.

Name and principal position	Year	Salary (\$)	Bonus \$(1)	Option awards \$(2)	All other compensation \$(3)	Total(\$)
Mark A. Velleca, M.D., Ph.D. Chief Executive Officer and President	2016	405,000	133,650	788,196	7,950	1,334,796
Rajesh K. Malik, M.D. Chief Medical Officer	2016	336,000	67,200	277,565	7,950	688,715
Gregory J. Mossinghoff Chief Business Officer and Secretary	2016	247,000	49,400	231,338	—	527,738

(1) Amounts represent cash bonuses earned for the 12-month period from January 1, 2016 to December 31, 2016, and exclude payments made in 2016 for 2015 bonuses.

(2) These amounts represent the aggregate grant date fair value for option awards granted during our fiscal year ended December 31, 2016, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note 8 to our Financial Statements, included elsewhere in this prospectus.

(3) These amounts represent matching contributions made by the Company for the Named Executive Officers under the Company's 401(k) plan. The Company's matching contribution is equal to 50% of the employee's deferrals under the plan up to 6% of the employee's compensation.

### Narrative disclosure to summary compensation table

We have entered into executive employment agreements with each of our named executive officers in connection with their employment with us, the material terms of which are described below. These executive employment agreements provide for "at will" employment and obligate each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment.

#### **Mark A. Velleca, M.D., Ph.D.**

We entered into an executive employment agreement with Dr. Velleca with respect to his service as Chief Executive Officer on May 19, 2014, which was subsequently amended on February 1, 2015, to reflect an increase to Dr. Velleca's annual base salary and the deletion of a provision providing for reimbursement of temporary housing and travel expenses in relation to his commute to our corporate headquarters, and on May 10, 2016, to reflect a subsequent increase to Dr. Velleca's annual base salary. Under the terms of the agreement, Dr. Velleca is entitled to an initial annual base salary of \$405,000, and Dr. Velleca is eligible to receive an annual bonus of up to 30% of his then-current base salary based on achievement of certain individual and corporate targets in the sole discretion of our board of directors. The agreement also provides for reimbursement of certain of Dr. Velleca's relocation expenses in an amount of up to \$25,000, which reimbursement will occur upon Dr. Velleca's relocation. Pursuant to the agreement, Dr. Velleca is entitled to 12 months of his then-current base salary in the event we terminate his employment without Cause, as defined below, or Dr. Velleca terminates his employment with us for Good Reason, as defined below, subject to Dr. Velleca's execution of a release satisfactory to us following such termination.

**Rajesh K. Malik, M.D.**

We entered into an executive employment agreement with Dr. Malik with respect to his service as Chief Medical Officer on July 1, 2014. Under the terms of the agreement, Dr. Malik is entitled to an initial annual base salary of \$325,000. Under the agreement, Dr. Malik is eligible to receive an annual bonus of up to 20% of his then-current base salary based on achievement of certain individual and corporate targets in the sole discretion of our board of directors. Half of Dr. Malik's bonus is payable in cash, and the other half may be paid in the form of options to purchase shares of our common stock, at the discretion of our board of directors. Pursuant to the agreement, Dr. Malik is entitled to six months of his then-current base salary in the event we terminate his employment without Cause, as defined below, or Dr. Malik terminates his employment with us for Good Reason, as defined below, subject to Dr. Malik's execution of a release satisfactory to us following such termination. In addition, Dr. Malik has agreed not to engage in any business competitive with or adverse to our business during his employment with us, and he has agreed not to hold certain positions following termination of his employment with us. For a 12-month period following termination of his employment with us Dr. Malik has agreed not to solicit our employees, customers, suppliers or vendors, under the terms set forth in his agreement.

**Gregory J. Mossinghoff**

We entered into an executive employment agreement with Mr. Mossinghoff with respect to his service as Chief Business Officer on February 1, 2015. Under the terms of the agreement, Mr. Mossinghoff is entitled to an initial annual base salary of \$240,000 and is eligible to receive an annual bonus of up to 20% of his then-current base salary based on achievement of certain individual and corporate targets in the sole discretion of our board of directors. Half of Mr. Mossinghoff's bonus is payable in cash, and the other half may be paid in the form of options to purchase shares of our common stock, at the discretion of our board of directors. Pursuant to the agreement, Mr. Mossinghoff is entitled to six months of his then-current base salary in the event we terminate his employment without Cause, as defined below, or Mr. Mossinghoff terminates his employment with us for Good Reason, as defined below, subject to Mr. Mossinghoff's execution of a release satisfactory to us following such termination. In addition, Mr. Mossinghoff has agreed not to engage in any business competitive with or adverse to our business during his employment with us, and he has agreed not to hold certain positions following termination of his employment with us. For a 12-month period following termination of his employment with us Mr. Mossinghoff has agreed not to solicit our employees, customers, suppliers or vendors, under the terms set forth in his agreement.

The following definitions apply to Dr. Velleca's, Dr. Malik's and Mr. Mossinghoff's executive employment agreements:

Cause is defined in each agreement as the employee's (i) fraud, embezzlement or misappropriation with respect to the Company, (ii) material breach of fiduciary duties to the Company, (iii) willful or negligent misconduct that has or may reasonably be expected to have a material adverse effect on the property, business, or reputation of the Company, (iv) material breach of the agreement, (v) willful failure or refusal to perform material duties under the agreement or failure to follow specific lawful instructions of our board of directors, in the case of Dr. Velleca and Dr. Malik, and the Chief Executive Officer, in the case of Mr. Mossinghoff, (vi) conviction or plea of *nolo contendere* in respect of a felony or misdemeanor involving moral turpitude, (vii) alcohol or substance abuse that has a material adverse effect on the ability to perform duties under the agreement, or (viii) engagement in a form of discrimination or harassment prohibited by law.

Good Reason is defined in each agreement as (i) a material reduction of base salary not generally applicable to other executive-level employees of the Company, (ii) a material diminution of authority, duties or responsibilities, (iii) the Company's material breach of the agreement, or (iv) in the case of Dr. Malik and Mr. Mossinghoff, a relocation of employee's primary workplace to a location that is more than 50 miles from the location of the employee's primary workplace as of the date of the agreement.

## Outstanding equity awards at 2016 fiscal year end

The following table shows grants of stock options outstanding on the last day of the fiscal year ended December 31, 2016, to each of the executive officers named in the Summary Compensation Table.

Name	Option Awards <sup>(1)</sup>			
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date
Mark A. Velleca, M.D., Ph.D.	792,985(2)	434,875(2)	0.13	5/9/2024
	336,870(3)	398,130(3)	0.10	2/27/2025
	142,075(4)	426,225(4)	1.24	12/21/2025
	—	850,000(5)	1.39	5/10/2026
Rajesh K. Malik, M.D.	20,000(6)	—	0.10	8/29/2023
	12,500(7)	—	0.13	12/5/2023
	203,261(8)	133,173(8)	0.13	7/11/2024
	103,120(9)	121,880(9)	0.10	2/27/2025
	43,000(10)	129,000(10)	1.24	12/21/2025
Gregory J. Mossinghoff	—	300,000(11)	1.39	5/10/2026
	171,900(12)	—	0.13	7/11/2024
	174,160(13)	205,840(13)	0.10	2/27/2025
	39,950(14)	119,850(14)	1.24	12/21/2025
	—	250,000(15)	1.39	5/10/2026

- (1) Each of the outstanding equity awards in the table above was granted pursuant to our 2011 Equity Incentive Plan, as amended.
- (2) Represents an option to purchase shares of our common stock granted on May 9, 2014. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vested on May 19, 2015, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the “—Narrative Disclosure to Summary Compensation Table” section, within 90 days following a Change in Control. A Change in Control is defined as a (i) merger or consolidation of the Company with or into another entity such that the stockholders of the Company prior to the transaction do not or are not expected to own a majority of the voting stock of the surviving entity, (ii) the sale or other disposition of all or substantially all of the assets of the Company, or (iii) the sale or other disposition of greater than 50% of the then-outstanding voting stock of the Company by holders thereof to one or more persons or entities who are not then stockholders of the Company.
- (3) Represents an option to purchase shares of our common stock granted on February 27, 2015. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on February 28, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the “—Narrative Disclosure to Summary Compensation Table” section within 90 days following a Change in Control, as defined in footnote (2) above.
- (4) Represents an option to purchase shares of our common stock granted on December 21, 2015. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on December 21, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the “—Narrative Disclosure to Summary Compensation Table” section within 90 days following a Change in Control, as defined in footnote (2) above.
- (5) Represents an option to purchase shares of our common stock granted on May 10, 2016. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on May 10, 2017, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the “—Narrative Disclosure to Summary Compensation Table” section within 90 days following a Change in Control, as defined in footnote (2) above.
- (6) Represents an option to purchase shares of our common stock granted on August 29, 2013. The shares underlying this option vested as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vested on July 1, 2013; on the same day of each of the two succeeding calendar months

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- thereafter, an additional one-fourth (1/4<sup>th</sup>) vested; and the final one-fourth (1/4<sup>th</sup>) vested on achievement of a performance condition on September 30, 2013, as determined by our board of directors.
- (7) Represents an option to purchase shares of our common stock granted on December 5, 2013. The shares underlying this option vested as follows: 5,000 vested on the date of grant, 5,000 vested upon achievement of a performance milestone in June 2014, as determined by our board of directors, and 2,500 vested upon achievement of a performance milestone in February 2014, as determined by our board of directors.
- (8) Represents an option to purchase shares of our common stock granted on July 11, 2014. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vested on July 1, 2015, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (9) Represents an option to purchase shares of our common stock granted on February 27, 2015. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on February 28, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (10) Represents an option to purchase shares of our common stock granted on December 21, 2015. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on December 21, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (11) Represents an option to purchase shares of our common stock granted on May 10, 2016. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on May 10, 2017, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (12) Represents an option to purchase shares of our common stock granted on July 11, 2014. The shares underlying this option vested as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vested on September 1, 2014, and on the same day of each succeeding calendar quarter thereafter, an additional one-fourth (1/4<sup>th</sup>) vested until all of the shares underlying the option vested.
- (13) Represents an option to purchase shares of our common stock granted on February 27, 2015. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on February 28, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (14) Represents an option to purchase shares of our common stock granted on December 21, 2015. The shares underlying this option vest as follows: Subject to continued service, one-fourth (1/4<sup>th</sup>) vests on December 21, 2016, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.
- (15) Represents an option to purchase shares of our common stock granted on May 10, 2016. The shares underlying this option vest as follows: subject to continued service, one-fourth (1/4<sup>th</sup>) vests on May 10, 2017, and on the same day of each succeeding calendar month thereafter, an additional one thirty-sixth (1/36<sup>th</sup>) of the remaining unvested shares will vest until all of the shares underlying the option are vested. Fifty percent of any unvested portion of the option will vest immediately upon a Change in Control, as defined in footnote (2) above, and any remaining unvested portion of the option will immediately vest if employee is terminated by us without Cause, as defined above under the "—Narrative Disclosure to Summary Compensation Table" section within 90 days following a Change in Control, as defined in footnote (2) above.

## Director compensation

The following table shows the total compensation paid or accrued during the fiscal year ended December 31, 2016, to each of our non-employee directors. Directors who are employed by us are not compensated for their service on our board of directors.

Name	Option awards (\$)(1)	All other compensation (\$)	Total (\$)
Seth A. Rudnick, M.D.(2)	321,722(3)(4)	13,500(5)	335,222
Fredric N. Eshelman, Pharm.D.	—	—	—
Michael J. Gutch, Ph.D.	—	—	—
Peter Kolchinsky, Ph.D.	—	—	—
Ron Laufer, M.D.(6)	—	—	—
Glenn P. Muir(7)	—	—	—
Christy L. Shaffer, Ph.D.	—	—	—
Timothy E. Sullivan	—	—	—

(1) Unless otherwise stated in the footnotes below, none of the non-employee directors held options to purchase our common stock or any other stock awards as of December 31, 2016.

(2) Dr. Rudnick serves as the Chairman of our board of directors and as a member of our scientific and clinical advisory boards.

(3) This amount represents the fair value of the option computed in accordance with ASC 825 and is marked to market at the end of each reporting period. Changes in fair value are recorded as unrealized gains or losses in the consolidated statement of operations in accordance with ASC 320.

(4) We granted Dr. Rudnick an option to purchase 175,000 shares of our common stock on May 10, 2016, which option grant was made at the discretion of our board of directors as compensation for his service as a chairman of our Board.

(5) All Other Compensation reflects compensation earned or received by Dr. Rudnick for service as a member of our scientific and clinical advisory boards, which includes \$13,500 in cash for his service on our advisory boards for the year ended December 31, 2016. As of December 31, 2016, Dr. Rudnick held options to purchase 490,581 shares of our common stock.

(6) Dr. Laufer resigned as a director on September 22, 2016.

(7) As of December 31, 2016, Mr. Muir held an option to purchase a total of 150,000 shares of our common stock.

### Agreements with non-employee directors

#### Seth A. Rudnick, M.D.

On July 1, 2014, we entered into a director agreement with Dr. Rudnick with respect to his service as the Chairman of our board of directors, which expired on June 30, 2016, or the 2014 Director Agreement. Following the expiration of the 2014 Director Agreement, we entered into a director agreement with Dr. Rudnick with respect to his service as the Chairman of our board of directors on July 15, 2016, or the 2016 Director Agreement. The term of the 2016 director Agreement is July 1, 2016, through June 30, 2018; however, the agreement may be terminated by Dr. Rudnick or by us at any time on at least 30 days' written notice.

On July 1, 2014, we entered into an advisory board member agreement with Dr. Rudnick with respect to his service as a member of our scientific and clinical advisory boards, which expired on June 30, 2016. On July 15, 2016, we entered into a subsequent advisory board member agreement with Dr. Rudnick with a term of July 1, 2016 through June 30, 2018; however, it may be terminated by Dr. Rudnick or by us at any time on at least 30 days' written notice. Under the terms of the agreement, Dr. Rudnick is entitled to receive cash compensation in the amount of \$6,000 annually and \$3,000 for each advisory board meeting attended in person and \$1,500 for each advisory board meeting attended telephonically. All fees are payable by us upon receipt of an invoice from Dr. Rudnick.

During the terms of the agreements, Dr. Rudnick is obligated to refrain from disclosing or using any of our proprietary information received in connection with his service and to assign to us any inventions conceived or

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developed in connection with his service. In addition, during the terms of the agreements, Dr. Rudnick is required to provide us with prior written notice of any consulting projects or employment he undertakes with companies whose business would directly competitive with our business, after receipt of which we may terminate the agreements effective immediately.

### **Non-employee director compensation policy**

We plan to adopt a policy with respect to the compensation payable to our non-employee directors, which will become effective upon the closing of the offering. Under this policy, each non-employee director will be eligible to receive compensation for his or her service consisting of annual cash retainers and equity awards. Our non-employee directors will receive the following annual retainers for their service:

<b>Position</b>	<b>Retainer</b>
Board Member	\$
Board Chairperson	
Audit Committee Chair	
Compensation Committee Chair	
Nominating and Governance Committee Chair	
Audit Committee Member	
Compensation Committee Member	
Nominating and Governance Committee Member	

Equity awards for non-employee directors will consist of (i) an initial equity award consisting of options to purchase \_\_\_\_\_ shares of common stock, upon first appointment to our board of directors, and (ii) annual equity awards consisting of options to purchase \_\_\_\_\_ shares of common stock, vesting 12 months after the grant date.

Directors may be reimbursed for travel, food, lodging and other expenses directly related to their service as directors. Directors are also entitled to the protection provided by their indemnification agreements and the indemnification provisions in our current certificate of incorporation and by-laws, as well as the certificate of incorporation and by-laws that will become effective upon the completion of this offering.

### **Equity compensation plans and other benefit plans**

#### **2017 Employee, director and consultant equity plan**

We plan to adopt a 2017 Employee, Director and Consultant Equity Plan, or the 2017 Plan, which will become effective upon the closing of the offering made hereby. The 2017 Plan will expire in 2027. Under the 2017 Plan, we may grant incentive stock options, non-qualified stock options, restricted and unrestricted stock awards and other stock-based awards. Each of the share numbers that follows in this description of the 2017 Plan are fixed and are not subject to change based on our reverse stock split. There will be (1) \_\_\_\_\_ shares of our common stock authorized for issuance under the 2017 Plan plus (2) \_\_\_\_\_ shares of our common stock represented by awards granted under our 2011 Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the forfeiture of shares of our common stock back to us on or after the date that the 2017 Plan becomes effective.

In addition, the 2017 Plan contains an "evergreen" provision, which allows for an annual increase in the number of shares of our common stock available for issuance under the 2017 Plan on the first day of each fiscal year



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during the period beginning in fiscal year 2018 and ending in fiscal year 2027. The annual increase in the number of shares shall be equal to the lowest of:

- shares of our common stock;
- % of the number of shares of our common stock outstanding as of such date; and
- an amount determined by our board of directors or compensation committee.

Our board of directors has authorized our compensation committee to administer the 2017 Plan. In accordance with the provisions of the plan, the compensation committee will determine the terms of options and other awards, including the following:

- which employees, directors and consultants shall be granted awards;
- the number of shares of our common stock subject to options and other awards;
- the exercise price of each option, which generally shall not be less than fair market value on the date of grant;
- the termination or cancellation provisions applicable to options;
- the terms and conditions of other awards, including conditions for repurchase, termination or cancellation, issue price and repurchase price; and
- all other terms and conditions upon which each award may be granted in accordance with our plan.

No participant may receive awards for more than \_\_\_\_\_ shares of our common stock in any fiscal year.

In addition, our board of directors or any committee to which the board of directors delegates authority may, with the consent of the affected plan participants, re-price or otherwise amend outstanding awards consistent with the terms of our plan.

Upon a merger, consolidation or sale of all or substantially all of our assets, our board of directors or any committee to which the board of directors delegates authority, or the board of directors of any corporation assuming our obligations, may, in its sole discretion, take any one or more of the following actions pursuant to our 2017 Plan, as to some or all outstanding awards, to the extent not otherwise agreed under any individual optionholder's option or employment agreement:

- provide that outstanding options will be assumed or substituted for options of the successor corporation;
- provide that the outstanding options must be exercised within a certain number of days, either to the extent the options are then exercisable, or at our board of directors' discretion, any such options being made partially or fully exercisable;
- terminate outstanding options in exchange for a cash payment of an amount equal to the difference between (a) the consideration payable upon consummation of the corporate transaction to a holder of the number of shares into which such option would have been exercisable to the extent then exercisable, or in our board of directors' discretion, any such options being made partially or fully exercisable, and (b) the aggregate exercise price of those options;
- provide that outstanding stock grants will be substituted for shares of the successor corporation or consideration payable with respect to our outstanding stock in connection with the corporate transaction; and

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- terminate outstanding stock grants in exchange for payment of an amount equal to the consideration payable upon consummation of the corporate transaction to a holder of the same number of shares comprising the stock grant, to the extent the stock grant is no longer subject to any forfeiture or repurchase rights, or at our board of directors' discretion, all forfeiture and repurchase rights being waived upon the corporation transaction.

### **2011 Equity Incentive Plan**

Our 2011 Equity Incentive Plan, as amended, or the 2011 Plan, was approved by our board of directors and our stockholders on March 3, 2011, and was most recently amended on November 7, 2016. The 2011 Plan provides for the issuance of up to 13,201,925 shares of our common stock. The 2011 Plan allows us to make grants of stock options, restricted stock, restricted stock units and stock appreciation rights to our employees, directors and consultants. As of January 31, 2017, under the 2011 Plan, options to purchase 11,215,314 shares of our common stock were outstanding, 1,601,011 shares of our common stock had been issued and were outstanding pursuant to the exercise of options, and 385,600 shares of our common stock were available for future awards. We anticipate that in connection with the completion of this offering, we will terminate the 2011 Plan.

Under the 2011 Plan, in the event of a consolidation, merger or other reorganization event, our compensation committee or the successor board of directors may, in its sole discretion, provide that all outstanding awards shall be assumed, converted or replaced by the successor corporation, or unless otherwise required by an award agreement, provide that all outstanding awards shall terminate, without accelerating vesting, immediately prior to the consummation of such reorganization event. In the event of an acquisition or any other transaction involving another entity, we may substitute or assume outstanding awards granted by another entity.

### **Other compensation**

We currently maintain broad-based benefits that are provided to all employees, including health insurance, life and long-term disability insurance and dental insurance.

### **401(k) Plan**

We maintain a 401(k) plan for employees. The 401(k) plan is intended to qualify under Section 401(k) of the Internal Revenue Service Code of 1986, as amended, so that contributions to the 401(k) plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn from the 401(k) plan, and so that contributions by us, if any, will be deductible by us when made. Under the 401(k) plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and to have the amount of such reduction contributed to the 401(k) plan. The 401(k) plan permits us to make contributions up to the limits allowed by law on behalf of all eligible employees. Since January 1, 2016, we make matching contributions of 50% of the first 6% contributed by employees to our 401(k) plan.

### **Rule 10b5-1 sales plans**

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in limited circumstances. Our directors and executive officers may also buy or sell additional shares of our common stock outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

## Certain relationships and related party transactions

The following is a description of transactions since January 31, 2014, to which we have been a party, in which the amount involved exceeds \$120,000, and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest. We refer to such transactions as “related party transactions” and such persons as “related parties.” With the approval of our board of directors, we have engaged in the related party transactions described below. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, from unaffiliated third parties.

Other than as described below, there have not been, nor are there any currently proposed, transactions or series of similar transactions to which we have been or will be a party other than compensation arrangements, which are described where required under the “Executive and Director Compensation” section.

### Equity financings

#### Series A financing

In October 2013 and May 2014, we issued an aggregate of 14,996,692 Series A Preferred Stock at a purchase price of \$0.84 per share for aggregate consideration of \$12.6 million. The Series A Preferred Stock was issued in two tranches of 7,509,696 shares and 7,486,996 shares, respectively.

The table below sets forth the aggregate number and purchase price of shares of Series A Preferred Stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares	Aggregate purchase price
MedImmune Ventures, Inc.	7,142,857	\$ 5,999,999.99
Hatteras Venture Partners IV SBIC, LP	5,970,829	\$ 5,015,496.02
Hatteras NC Fund, LP	597,698	\$ 502,066.55

#### Series B financing

In February 2015 and December 2015, we issued an aggregate of 22,928,234 shares of our Series B Preferred Stock at a purchase price of \$1.4507 per share for an aggregate consideration of \$33.3 million. The Series B Preferred Stock was issued in two tranches of 11,382,087 shares and 11,546,147 shares, respectively.

The table below sets forth the aggregate number of shares of Series B Preferred Stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares	Aggregate purchase price
MedImmune Ventures, Inc.	2,412,628	\$ 3,499,999.44
Hatteras Venture Partners IV SBIC, LP	2,412,628	\$ 3,499,999.44
Eshelman Ventures, LLC	6,893,224	\$ 10,000,000.06
RA Capital Healthcare Fund, L.P.	5,169,916	\$ 7,499,997.16
Lumira Capital II, L.P.	3,154,882	\$ 4,576,787.32
Lumira Capital II (International), L.P.	291,728	\$ 423,209.82

### Series C financing

In April 2016, May 2016 and June 2016, we issued an aggregate of 16,828,217 shares of our Series C Preferred Stock at a purchase price of \$2.9712 per share for an aggregate consideration of \$50 million. The Series C Preferred Stock was issued in three closings of 14,892,972 shares, 925,552 shares and 1,009,693 shares, respectively.

The table below sets forth the aggregate number of shares of Series C Preferred Stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares	Aggregate purchase price
MedImmune Ventures, Inc.	673,128	\$ 1,999,997.91
Hatteras Venture Partners IV SBIC, LP	883,481	\$ 2,624,998.75
Eshelman Ventures, LLC	2,524,233	\$ 7,500,001.09
RA Capital Healthcare Fund, L.P.	1,361,403	\$ 4,045,000.59
L2 Ventures, LLC	126,212	\$ 375,001.09
Lumira Capital II, L.P.	770,192	\$ 2,288,394.47
Lumira Capital II (International), L.P.	71,218	\$ 211,602.92
Glenn Muir	302,908	\$ 900,000.25

### Transfer of Series B preferred stock

On March 24, 2016, Carolina Research Ventures, LLC transferred 172,331 shares of Series B Preferred Stock to L2 Ventures, LLC, an affiliate of Hatteras Venture Partners IV SBIC, LP.

### Agreements with stockholders

In connection with the Series C Preferred Stock financing, we entered into the Third Amended and Restated Stockholders Agreement, dated as of April 27, 2016, or Stockholders Agreement, with certain of our stockholders, including our principal stockholders. The Stockholders Agreement will terminate immediately upon completion of the offering.

Also in connection with the Series C Preferred Stock financing, we entered into a Second Amended and Restated Registration Rights Agreement, dated as of April 27, 2016, with certain of our stockholders, including our principal stockholders, pursuant to which these stockholders will have, among other things, registration rights under the Securities Act of 1933, as amended, with respect to common stock that they will hold following this offering. See the "Description of Capital Stock—Registration Rights" section for a further description of the terms of this agreement.

### Director and executive officer compensation

Please see the "Executive and Director Compensation" section for a discussion of payments and options granted to our named executive officers and non-employee directors.

### Employment agreements

We have entered into employment agreements with our executive officers. For more information regarding these agreements, see the "Director and Executive Compensation—Narrative Disclosure to Summary Compensation Table" section.

## **Indemnification agreements with officers and directors and directors' and officers' liability insurance**

In connection with this offering, we have entered into indemnification agreements with each of our executive officers and directors. The indemnification agreements, our restated certificate of incorporation and our restated by-laws to be in effect upon completion of this offering will require us to indemnify our directors to the fullest extent not prohibited by Delaware law. Subject to certain limitations, our restated by-laws also require us to advance expenses incurred by our directors and officers. We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

## **Policies and procedures for related party transactions**

In connection with this offering, we plan to adopt a written policy, effective upon completion of this offering, that requires all future transactions between us and any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons, as defined in Item 404 of Regulation S-K, or their affiliates, in which the amount involved is equal to or greater than \$120,000, be approved in advance by our audit committee. Any request for such a transaction must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, the extent of the related party's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances.

## Principal stockholders

The following table sets forth certain information with respect to the beneficial ownership of our common stock at January 31, 2017, and as adjusted to reflect the sale of our common stock in this offering, for:

- each of our directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person, or group of affiliated persons, who beneficially owned more than 5% of our common stock.

The number of shares of our common stock beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of January 31, 2017, through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person.

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The percentage of shares beneficially owned is computed on the basis of 61,234,107 shares of our common stock outstanding as of January 31, 2017, which reflects the assumed conversion of all outstanding shares of our preferred stock into an aggregate of 56,799,234 shares of our common stock. Shares of our common stock that a person has the right to acquire within 60 days of January 31, 2017, are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group.

Name and address of beneficial owner(1)	Number of shares of common stock beneficially owned	Percentage of shares of common stock beneficially owned	
		Before offering	After offering
<b>More than 5% stockholders:</b>			
Hatteras Venture Partners IV SBIC, LP(2)	12,121,202	19.79%	
MedImmune Ventures, Inc.(3)	10,228,613	16.70%	
Eshelman Ventures, LLC(4)	9,417,457	15.38%	
RA Capital Healthcare Fund, L.P.(5)	6,531,319	10.67%	
Lumira Capital II, L.P.(6)	4,288,020	7.00%	
<b>Directors and named executive officers:</b>			
Mark A. Velleca, M.D., Ph.D.(7)	1,430,123	2.28%	
Rajesh K. Malik, M.D.(7)	434,727	*	
Gregory J. Mossinghoff(7)	419,745	*	
Seth A. Rudnick, M.D.(8)	307,555	*	
Michael Gutch	—	—	
Fredric N. Eshelman, Pharm.D.(4)	9,417,457	15.38%	
Peter Kolchinsky, Ph.D.(5)	6,531,319	10.67%	
Glenn P. Muir(9)	377,904	*	
Christy L. Shaffer, Ph.D.(10)	298,543	*	
Timothy Sullivan.	—	—	
<b>All executive officers and directors as a group (12 persons)(11)</b>	<b>19,897,049</b>	<b>30.89%</b>	

\* Represents beneficial ownership of less than one percent of our outstanding common stock.

- (1) Unless otherwise indicated, the address for each beneficial owner listed is c/o G1 Therapeutics, Inc., 79 T.W. Alexander Drive, 4501 Research Commons, Suite 100, Research Triangle Park, NC 27709.
- (2) Consists of (a) 599,781 shares of our common stock, 1,318,681 shares of our Series 1 Preferred Stock, 5,970,829 shares of our Series A Preferred Stock, 2,412,628 shares of our Series B Preferred Stock, and 883,481 shares of our Series C Preferred Stock held by Hatteras Venture Partners IV SBIC, LP; (b) 39,561 shares of our common stock and 597,698 shares of our Series A Preferred Stock held by Hatteras NC Fund, LP, an affiliate of Hatteras Venture Partners IV SBIC, LP; and (c) 172,331 shares of Series B Preferred Stock and 126,212 shares of Series C Preferred Stock held by L2 Ventures, LLC, an affiliate of Hatteras Venture Partners IV SBIC, LP. The general partner of Hatteras Venture Partners IV SBIC, LP is Hatteras Venture Advisors IV SBIC, LLC; the general partner of Hatteras NC Fund, LP is Hatteras Venture Advisors IV, LLC and the general partner of L2 Ventures, LLC is Hatteras Venture Advisors V, LLC. Each of Hatteras Venture Advisors IV SBIC, LLC and Hatteras Venture Advisors IV, LLC is owned by Clay B. Thorp, John Crumpler, Douglas Reed, Kenneth B. Lee and Robert A. Ingram. Hatteras Venture Advisors V, LLC is owned by Clay B. Thorp, John Crumpler, Douglas Reed, Christy Shaffer and Robert A. Ingram. Each of Hatteras Venture Advisors IV SBIC, LLC, Hatteras Venture Advisors IV, LLC, Clay B. Thorp, John Crumpler, Douglas Reed, Kenneth B. Lee and Robert A. Ingram may be deemed to beneficially own the shares held by Hatteras Venture Partners IV SBIC, LP. Each of Hatteras Venture Advisors V, LLC, Clay B. Thorp, John Crumpler, Douglas Reed, Christy Shaffer and Robert A. Ingram may be deemed to own the shares held by L2 Ventures, LLC. The address of each entity and individual listed in this note is 280 S. Magnum Street, Suite 350, Durham, NC 27701.
- (3) Consists of 7,142,857 shares of our Series A Preferred Stock, 2,412,628 shares of our Series B Preferred Stock and 673,128 shares of our Series C Preferred Stock held by MedImmune Ventures, Inc. MedImmune Ventures, Inc. is wholly owned by AstraZeneca plc, and AstraZeneca plc may be deemed to beneficially own the shares held by MedImmune Ventures, Inc. The address of MedImmune Ventures, Inc. is One MedImmune Way, Gaithersburg, MD 20878. The address of AstraZeneca plc is 2 Kingdom Street, London W2 6BD.

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- (4) Consists of 6,893,224 shares of our Series B Preferred Stock and 2,524,233 shares of our Series C Preferred Stock held by Eshelman Ventures, LLC. Dr. Fredric Eshelman, a member of our board of directors and the founder and principal of Eshelman Ventures, LLC, may be deemed to beneficially own the shares held by Eshelman Ventures, LLC. The address of Eshelman Ventures, LLC and Dr. Eshelman is 319 N. Third Street, Suite 301, Wilmington, NC 28401.
- (5) Consists of 5,169,916 shares of our Series B Preferred Stock and 1,361,403 shares of our Series C Preferred Stock held by RA Capital Healthcare Fund, L.P. Dr. Peter Kolchinsky, a member of our board of directors, is the managing member of RA Capital Management, LLC, the general partner of RA Capital Healthcare Fund, L.P. Dr. Kolchinsky and RA Capital Management, LLC may be deemed to beneficially own the shares held by RA Capital Healthcare Fund, L.P. The address of each entity and individual listed in this note is 20 Park Plaza, Suite 1200, Boston, MA 02116.
- (6) Consists of shares of 3,154,882 shares of our Series B Preferred Stock and 770,192 shares of our Series C Preferred Stock held by Lumira Capital II, L.P. and 291,728 shares of our Series B Preferred Stock and 71,218 shares of our Series C Preferred Stock held by Lumira Capital II (International), L.P., an affiliate of Lumira Capital II, L.P. Lumira Capital GP, L.P., the general partners of which are Lumira GP Inc. and Lumira GP Holdings Co., is the general partner of each of Lumira Capital II, L.P. and Lumira Capital II (International), L.P. Each of Lumira Capital II, L.P. and Lumira Capital II (International), L.P. is managed by Lumira Capital Investment Management Inc. Each of Lumira Capital GP, L.P., Lumira GP Inc., Lumira GP Holdings Co. and Lumira Capital Investment Management Inc. may be deemed to beneficially own the shares held by Lumira Capital II, L.P. The address of each entity listed in this note is 141 Adelaide Street West, Suite 770, Toronto, Ontario, Canada M5H 3L5.
- (7) Consists of options to purchase shares of our common stock that are exercisable as of January 31, 2017, or will become exercisable within 60 days after such date.
- (8) Consists of options to purchase shares of our common stock held by Dr. Seth Rudnick that are exercisable as of January 31, 2017, or will become exercisable within 60 days after such date. This number does not include 166,577 shares of our common stock and 8,271 shares of our Series B Preferred Stock held by the Seth A. Rudnick 2014 Irrevocable GST Trust U/A Dated 3/1/2014, because Dr. Rudnick has neither voting nor investment power over these shares.
- (9) Consists of 74,996 options to purchase shares of our common stock that are exercisable as of January 31, 2017, or will become exercisable within 60 days after such date and 302,908 shares of Series C Preferred Stock.
- (10) Consists of 172,331 shares of Series B Preferred Stock and 126,212 shares of Series C Preferred Stock held by L2 Ventures, LLC. Dr. Christy Shaffer, a member of our board of directors may be deemed to beneficially own the shares held by L2 Ventures, LLC. See note 2 above.
- (11) See notes, 4, 5, 7, 8 and 9 above. Also Includes Jay Strum and Jennifer K. Moses, who are executive officers but not named executive officers.



## Description of capital stock

### General

Upon the completion of this offering, our authorized capital stock will consist of \_\_\_\_\_ shares of common stock, par value \$0.0001 per share, and \_\_\_\_\_ shares of preferred stock, par value \$0.0001 per share, all of which will be undesignated, and there will be \_\_\_\_\_ shares of common stock outstanding and no shares of preferred stock outstanding. As of December 31, 2016, we had approximately 40 record holders of our capital stock. All of our outstanding shares of preferred stock will automatically convert into shares of our common stock upon the completion of this offering.

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated by-laws are summaries of material terms and provisions and are qualified by reference to our amended and restated certificate of incorporation and amended and restated by-laws, copies of which have been filed with the SEC as exhibits to the registration statement of which this prospectus is a part. The descriptions of our common stock and preferred stock reflect the content of the amended and restated certificate of incorporation and amended and restated by-laws that will become effective immediately prior to the completion of this offering.

### Common stock

Upon the completion of this offering, we will be authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described under the “—Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws” section below, a majority vote of the holders of common stock is generally required to take action under our amended and restated certificate of incorporation and amended and restated by-laws.

### Preferred stock

Upon the completion of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of \_\_\_\_\_ shares of preferred stock in one or more series. Our board of directors can designate the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying, deferring or preventing a change in control of our company, which might harm the market price of our common stock. See also the “—Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws” section below.

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Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. Upon the completion of this offering, we will have no shares of preferred stock outstanding and we have no current plans to issue any shares of preferred stock following completion of this offering.

### **Warrants**

As of December 31, 2016, the following three warrants were outstanding: (i) a warrant to purchase 65,934 shares of our Series 1 Preferred Stock, which has an exercise price of \$0.455 per share, expires on November 18, 2022, and will be converted into warrants to purchase 65,934 shares of common stock upon completion of this offering, (ii) a warrant to purchase 10,400 shares of our common stock, which has an exercise price of \$0.10 per share and expires on March 31, 2018, and (iii) a warrant to purchase 50,000 shares of our common stock, which has an exercise price of \$0.01 per share and expires on August 29, 2021.

### **Registration rights**

We entered into a Second Amended and Restated Registration Rights Agreement, dated as of April 27, 2016, or the Registration Rights Agreement, with certain holders of our capital stock. These shares will represent approximately % of our outstanding common stock after this offering, or % if the underwriters exercise their option to purchase additional shares in full. These shares also may be sold under Rule 144 under the Securities Act of 1933, as amended, depending on their holding period and subject to restrictions in the case of shares held by persons deemed to be our affiliates.

Under the Registration Rights Agreement, holders of registrable shares can demand that we file a registration statement or request that their shares be included on a registration statement that we are otherwise filing, in either case, registering the resale of their shares of common stock. These registration rights are subject to conditions and limitations, including the right, in certain circumstances, of the underwriters of an offering to limit the number of shares included in such registration and our right, in certain circumstances, not to effect a requested S-1 registration within 60 days before or 180 days following any offering of our securities, including this offering, or a requested S-3 registration within 30 days before or 90 days following any offering of our securities, including this offering.

#### ***Demand registration rights***

Following the date that is 180 days after the date of this prospectus, the holders of (i) at least 60% of our Series B Preferred Stock prior to the automatic conversion of the Series B Preferred Stock upon consummation of this offering and (ii) at least 65% of our Series C Preferred Stock prior to the automatic conversion of the Series C Preferred Stock upon consummation of this offering, may require us to file a registration statement under the Securities Act on a Form S-1 at our expense, subject to certain exceptions, with respect to the resale of their registrable shares, and we are required to use commercially reasonable efforts to effect the registration. Any time after we are eligible to use a registration statement under the Securities Act on Form S-3, the holders of at least 10% of our registrable securities under the Registration Rights Agreement may require us to file a registration statement on Form S-3 at our expense, subject to certain exceptions, with respect to the resale of their registrable shares, and we are required to use commercially reasonable efforts to effect the registration.

#### ***Piggyback registration rights***

If we propose to register any of our securities under the Securities Act for our own account or the account of any other holder, the holders of registrable shares are entitled to notice of such registration and to request that

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we include registrable shares for resale on such registration statement, subject to the right of any underwriter to limit the number of shares included in such registration.

We will pay all registration expenses, other than underwriting discounts and commissions, related to any demand or piggyback registration. The Registration Rights Agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders, in the event of misstatements or omissions in the registration statement attributable to us except in the event of fraud, and they are obligated to indemnify us for misstatements or omissions attributable to them.

The registration rights will terminate upon the later of the date on which all registrable shares have been sold, the closing of certain liquidation events, and the fifth anniversary of the closing date of this offering.

### **Stockholders agreement**

We entered into a Third Amended and Restated Stockholders Agreement, dated as of April 27, 2016, or Stockholders Agreement, with certain holders of our capital stock. This agreement provides for certain rights and obligations, such as board composition requirements and stock transfer restrictions. This agreement will terminate upon the completion of this offering; however, the lock-up provision under the Stockholders Agreement will survive termination pursuant to the terms of the agreement. See the “Shares Eligible for Future Sale—Lock-Up Agreements” section.

### **Anti-takeover effects of Delaware law, our amended and restated certificate of incorporation and our amended and restated by-laws**

Our amended and restated certificate of incorporation and amended and restated by-laws that will take effect in connection with the closing of this offering include a number of provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

#### ***Board composition and filling vacancies***

In accordance with our amended and restated certificate of incorporation, our board of directors is divided into three classes serving three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, may only be filled by the affirmative vote of a majority of our directors then in office, even if less than a quorum.

#### ***No written consent of stockholders***

Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

#### ***Meetings of stockholders***

Our amended and restated by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special

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meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

### ***Advance notice requirements***

Our amended and restated by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in the amended and restated by-laws. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

### ***Amendment to by-laws and certificate of incorporation***

As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors and, if required by law or our amended and restated certificate of incorporation, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability, exclusive jurisdiction of Delaware Courts and the amendment of our amended and restated by-laws and amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated by-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the amended and restated by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

### ***Blank check preferred stock***

Our amended and restated certificate of incorporation provides for \_\_\_\_\_ authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

### **Section 203 of the Delaware General Corporation Law**

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation’s voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or by-laws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

### ***Exclusive jurisdiction of certain actions***

Our amended and restated certificate of incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name, actions against our directors, officers and employees for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware, unless we otherwise consent. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers.

### **NASDAQ Global Market Listing**

We have submitted an application to list our common stock on The NASDAQ Global Market under the trading symbol “GTHX.”

### **Transfer agent and registrar**

The transfer agent and registrar for our common stock will be Computershare Trust Company, N.A. The transfer agent and registrar’s address is 250 Royall Street, Canton, MA 02021.

## Shares eligible for future sale

Prior to this offering, there has been no public market for our common stock. Future sales of our common stock, including shares issued upon the exercise of outstanding options or warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after completion of this offering due to contractual and legal restrictions on resale described below. Future sales of our common stock in the public market either before (to the extent permitted) or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

### Sale of restricted shares

Upon the closing of this offering, based on the number of shares of our common stock outstanding as of December 31, 2016, and assuming (1) the conversion of our outstanding preferred stock into common stock, (2) no exercise of the underwriters' option to purchase additional shares of common stock and (3) no exercise of outstanding options or warrants, we will have outstanding an aggregate of approximately \_\_\_\_\_ shares of common stock. Of these shares, all of the \_\_\_\_\_ shares of common stock to be sold in this offering, and any shares sold upon exercise of the underwriters' option to purchase additional shares will be freely tradable in the public market without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act. All remaining shares of common stock held by existing stockholders immediately prior to the completion of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, which rules are summarized below.

As a result of the lock-up agreements referred to below and the provisions of Rule 144 and Rule 701 under the Securities Act, the shares of our common stock (excluding the shares sold in this offering) that will be available for sale in the public market are as follows:

- beginning on the date of this prospectus, the \_\_\_\_\_ shares of common stock sold in this offering will be immediately available for sale in the public market;
- beginning 90 days after the date of this prospectus, \_\_\_\_\_ additional shares of common stock may become eligible for sale in the public market upon the satisfaction of certain conditions as set forth in the "—Lock-Up Agreements" section, of which \_\_\_\_\_ shares would be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below;
- beginning 181 days after the date of this prospectus, \_\_\_\_\_ additional shares of common stock will become eligible for sale in the public market, of which \_\_\_\_\_ shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below; and
- the remainder of the shares of common stock will be eligible for sale in the public market from time to time thereafter, subject in some cases to the volume and other restrictions of Rule 144, as described below.

## Lock-up agreements

In connection with this offering, we, our directors, our executive officers and stockholders holding substantially all of our shares of common stock outstanding as of December 31, 2016 (assuming conversion of all of our outstanding shares of preferred stock), and substantially all of our option holders who are not also stockholders have agreed, subject to certain exceptions, with the underwriters not to dispose of or hedge any shares of our common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of the lock-up agreement continuing through the date 180 days after the date of this prospectus, except with the prior written consent of J.P. Morgan Securities LLC and Cowen and Company, LLC, as the representatives of the underwriters and certain other exceptions. The representatives of the underwriters have advised us that they have no current intent or arrangement to release any of the shares subject to the lock-up agreements prior to the expiration of the lock-up period.

Following the lock-up periods set forth in the agreements described above, and assuming that the representatives of the underwriters do not release any parties from these agreements, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

In addition, pursuant to our Second Amended and Restated Stockholders Agreement, as amended, the stockholders that are parties thereto have agreed that they will not sell, make any short sale of, grant any option for the purchase of, or otherwise dispose of any shares of our stock during the same 180-day restricted period referred to above.

## Rule 144

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, for at least 90 days, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the sales proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of common shares then outstanding, which will equal approximately \_\_\_\_\_ shares of common stock immediately after this offering (calculated on the basis of the number of shares of our common stock outstanding as of December 31, 2016, the assumptions described above and assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options or warrants); or
- the average weekly trading volume of our common stock on The NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

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Such sales under Rule 144 by our “affiliates” or persons selling shares on behalf of our “affiliates” are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

### **Rule 701**

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act before the effective date of the registration statement of which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) is entitled to rely on Rule 701 to resell such shares beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act in reliance on Rule 144, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act, under Rule 701 persons who are not our “affiliates,” as defined in Rule 144, may resell those shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our “affiliates” may resell those shares without compliance with Rule 144’s minimum holding period requirements (subject to the terms of the lock-up agreement referred to below, if applicable).

### **Equity incentive plans**

We intend to file with the SEC a registration statement under the Securities Act covering the shares of common stock that we may issue upon exercise of outstanding options reserved for issuance under the 2011 Equity Incentive Plan and the 2017 Employee, Director and Consultant Equity Plan. Such registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.



## Material U.S. federal income and estate tax consequences to non-U.S. holders

The following is a summary of the material U.S. federal income tax consequences of the ownership and disposition of our common stock to Non-U.S. Holders (defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed or subject to differing interpretations, possibly with retroactive effect, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local or any non-U.S. jurisdiction, the 3.8% Medicare tax on net investment income or any alternative minimum tax consequences. In addition, this discussion does not address tax considerations applicable to a Non-U.S. Holder's particular circumstances or to a Non-U.S. Holder that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt or government organizations;
- brokers of or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our capital stock;
- certain U.S. expatriates, citizens or former long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction," synthetic security, other integrated investment, or other risk reduction transaction;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes);
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- real estate investment trusts or regulated investment companies;
- pension plans;
- partnerships, or other entities or arrangements treated as partnerships for U.S. federal income tax purposes, or investors in any such entities;
- persons for whom our stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code;
- integral parts or controlled entities of foreign sovereigns;
- tax-qualified retirement plans;
- controlled foreign corporations;

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- passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax; or
- persons that acquire our common stock as compensation for services.

In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our common stock, the tax treatment of a partner generally will depend on the status of the partner the activities of the partnership, and certain determinations made at the partner level. Accordingly, partnerships that hold our common stock, and partners in such partnerships, should consult their tax advisors regarding the U.S. federal income tax consequences to them of the purchase, ownership, and disposition of our common stock.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local or any non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

### **Definition of a non-U.S. holder**

For purposes of this summary, a “Non-U.S. Holder” is any beneficial owner of our common stock that is not a “U.S. person,” and is not a partnership, or an entity disregarded from its owner, each for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

### **Distributions**

As discussed under the “Dividend Policy” section, above, we do not anticipate paying any dividends on our capital stock in the foreseeable future. If we make distributions on our common stock, those payments will constitute dividends for U.S. income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce a Non-U.S. Holder’s basis in our common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under the “—Gain on Sale or Other Disposition of Common Stock” section. Any such distributions would be subject to the discussions below regarding back-up withholding and FATCA.

Subject to the discussion below on effectively connected income, any dividend paid to a Non-U.S. Holder generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. In order to receive a reduced treaty rate, a Non-U.S. Holder must provide us or our agent with an IRS Form W-8BEN (generally including a U.S.

taxpayer identification number), IRS Form W-8-BEN-E or another appropriate version of IRS Form W-8 (or a successor form), which must be updated periodically, and which, in each case, must certify qualification for the reduced rate. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a U.S. trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States) generally are exempt from the withholding tax described above. In order to obtain this exemption, the Non-U.S. Holder must provide the applicable withholding agent with an IRS Form W-8ECI or successor form or other applicable IRS Form W-8 certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if you are Non-U.S. Holder that is a corporation, dividends you receive that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, are attributable to a permanent establishment maintained by the you in the United States) may also be subject to a branch profits tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items.

If you are eligible for a reduced rate of withholding tax pursuant to a tax treaty, you may be able to obtain a refund of any excess amounts currently withheld if you timely file an appropriate claim for refund with the IRS.

### **Gain on sale or other disposition of common stock**

Subject to the discussion below regarding backup withholding and FATCA, a Non-U.S. Holder generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if an income tax treaty applies, the gain is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States), in which case the Non-U.S. Holder will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates, and for a Non-U.S. Holder that is a corporation, such Non-U.S. Holder may be subject to the branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items;
- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case the Non-U.S. Holder will be required to pay a flat 30% tax on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though the Non-U.S. Holder is not considered a resident of the United States) (subject to applicable income tax or other treaties); or
- our common stock constitutes a U.S. real property interest by reason of our status as a "U.S. real property holding corporation" for U.S. federal income tax purposes, aUSRPHC, at any time within the shorter of the five-year period preceding the disposition or the Non-U.S. Holder's holding period for our common stock. We believe we are not currently and do not anticipate becoming aUSRPHC. However, because the determination of whether we are aUSRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become aUSRPHC in the future. Even if we become aUSRPHC, however, gain arising from the sale or other taxable

disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax as long as our common stock is regularly traded on an established securities market and such Non-U.S. Holder does not, actually or constructively, hold more than five percent of our common stock at any time during the applicable period that is specified in the Code. If the foregoing exception does not apply, then if we are or were to become a USRPHC a purchaser may be required to withhold 15% of the proceeds payable to a Non-U.S. Holder from a sale of our common stock and such Non-U.S. Holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code).

### **Backup withholding and information reporting**

Generally, we must file information returns annually to the IRS in connection with any dividends on our common stock paid to a Non-U.S. Holder, regardless of whether any tax was actually withheld. A similar report will be sent to the Non-U.S. Holder. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in the Non-U.S. Holder's country of residence.

Payments of dividends or of proceeds on the disposition of stock made to a Non-U.S. Holder may be subject to additional information reporting and backup withholding at a current rate of 28% unless such Non-U.S. Holder establishes an exemption, for example by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E, IRS Form W-8ECI, or another appropriate version of IRS Form W-8 (or a successor form). Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that a holder is a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

### **Foreign account tax compliance act**

The Foreign Account Tax Compliance Act, or FATCA, imposes withholding tax on certain types of payments made to foreign financial institutions and certain other non-U.S. entities. The legislation imposes a 30% withholding tax on dividends on, or, on or after January 1, 2019, gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or to certain "non-financial foreign entities" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements. If the country in which a payee is resident has entered into an "intergovernmental agreement" with the United States regarding FATCA, that agreement may permit the payee to report to that country rather than to the U.S. Department of the Treasury. Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our common stock, and the possible impact of these rules on the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

## **Federal estate tax**

Common stock owned (or treated as owned) by an individual who is not a citizen or a resident of the United States (as defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes unless an applicable estate or other tax treaty provides otherwise, and therefore may be subject to U.S. federal estate tax.

**The preceding discussion of U.S. federal tax considerations is for general information only. It is not tax advice. Each prospective investor should consult its tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed change in applicable laws.**

## Underwriting

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the shares of common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of common stock set forth opposite its name below. J.P. Morgan Securities LLC and Cowen and Company, LLC are the representatives of the underwriters.

Underwriter	Number of shares
J.P. Morgan Securities LLC	
Cowen and Company, LLC	
Needham & Company, LLC	
Wedbush Securities Inc.	
Total	

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares of common stock sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act of 1933, as amended, or the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares of common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

### Overallotment option to purchase additional shares

We have granted to the underwriters an option to purchase up to \_\_\_\_\_ additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of shares offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table following the first paragraph of this section.

### Discounts and commissions

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares of common stock.

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We estimate that our total expenses of the offering, excluding the underwriting discount, will be approximately \$ \_\_\_\_\_ million and are payable by us. We also have agreed to reimburse the underwriters for certain of their expenses, in an amount of up to \$ \_\_\_\_\_, as set forth in the underwriting agreement, including an amount of up to \$ \_\_\_\_\_, that may be incurred in connection with the review by the Financial Industry Regulatory Authority, Inc., or FINRA, of the terms of the offering.

		Total	
	Per share	With overallotment	Without overallotment
Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares to securities dealers at the public offering price less a concession not in excess of \$ \_\_\_\_\_ per share. The underwriters may allow, and the dealers may reallow, a discount not in excess of \$ \_\_\_\_\_ per share to other dealers. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

## Discretionary accounts

The underwriters do not intend to confirm sales of the shares of common stock to any accounts over which they have discretionary authority.

## Market information

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In addition to prevailing market conditions, the factors to be considered in these negotiations include:

- the history of, and prospects for, our company and the industry in which we compete;
- our past and present financial information;
- an assessment of our management; its past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for our common stock may not develop, or if such a market develops, may not be sustained. It is also possible that after the offering, the shares will not trade in the public market at or above the initial public offering price.

We have applied to list our common stock on The NASDAQ Global Market under the symbol "GTHX."

## Price stabilization, short positions and penalty bids

### **Stabilization**

In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares of our common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of our common stock while the offering is in progress.
- Overallotment transactions involve sales by the underwriters of shares of our common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position that may be either a covered short position or a naked short position. In a covered short position, the number of shares overallotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising the overallotment option and/or purchasing shares of common stock in the open market.
- Syndicate covering transactions involve purchases of shares of our common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares of common stock to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of our common stock in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the shares of common stock originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of shares of our common stock. These transactions may be effected on The NASDAQ Global Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriters may engage in passive market making transactions in the common stock on The NASDAQ Global Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of those transactions. The underwriters are not required to engage in passive market making and may end passive market making activities at any time.



## Lock-up agreements

Pursuant to certain “lock-up” agreements, we and our executive officers, directors and stockholders holding substantially all of our shares of common stock outstanding as of December 31, 2016 (assuming conversion of all of our outstanding shares of preferred stock), and substantially all of our option holders who are not also stockholders, or the locked-up parties, have agreed, subject to certain exceptions, not to offer, sell, contract to sell, assign, transfer, pledge, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or make any demand or request or exercise any right with respect to the registration of, or engage in any short selling of, any of our common stock or securities convertible into or exchangeable or exercisable for any of our common stock without the prior written consent of both of the representatives of the underwriters, for a period of 180 days after the date of the pricing of the offering.

This lock-up provision applies to our common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions to the lock-up for the locked-up parties include: (a) transfers made as a bona fide gift to an immediate family member, to a trust the beneficiaries of which are exclusively the locked-up party or the locked-up party’s immediate family member, or to a charity or educational institution; each of which is subject to certain conditions set forth in the lock-up agreement; (b) transfers made by will or intestate succession upon the death of the locked-up party; each of which is subject to certain conditions set forth in the lock-up agreement; (c) if the locked-up party is a corporation, partnership, limited liability company or other business entity, transfers not for value to a stockholder, partner or member of, or owner of a similar equity interest in, the locked-up party executing the agreement; each of which is subject to certain conditions set forth in the lock-up agreement; (d) if the locked-up party is a corporation, partnership, limited liability company or other business entity, transfers made by the locked-up party in connection with the sale of all or substantially all of its assets or equity interests; (e) if the locked-up party is a corporation, partnership, limited liability company or other business entity, transfers not for value to an affiliate of the locked-up party; each of which is subject to certain conditions set forth in the lock-up agreement; (f) the locked-up party’s net exercise or cashless exercise of our options or warrants; (g) any transfers made by a locked-up party to satisfy tax withholding obligations in connection with our equity incentive plans or other arrangements disclosed in this prospectus; (h) the establishment of a trading plan in accordance with Rule 10b5-1(c) under the Exchange Act, provided, that no sales or other disposition under such trading plan may occur during the 180-day restricted period; (i) sales of shares acquired in this offering or in open market transactions after this offering so long as no public announcement or filing under Section 16(a) of the Exchange Act shall be required or voluntarily made; (j) transfers made through the operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement; and (k) transfers, sales, tenders or other dispositions of our common stock pursuant to a tender offer for our securities or any other transaction, including, without limitation, consolidation or other business combination, involving a change of control that has been approved by our board of directors. The exceptions to the lock-up for us are: (i) our sale of shares in this offering; (ii) the issuance of common stock or options to acquire common stock pursuant to any of our director or employee stock option plans, stock ownership plans or dividend reinvestment plans, as described in this prospectus; (iii) the issuance of common stock pursuant to the conversion or exercise of existing securities outstanding on the date hereof; and (iv) the adoption of a new equity incentive plan; each of which is subject to certain conditions set forth in the underwriting agreement.

The representatives may, acting together, in their sole discretion and at any time or from time to time before the termination of the lock-up period, release all or any portion of the securities subject to lock-up agreements;

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provided, however, that, subject to limited exceptions, at least three business days before the release or waiver or any lock-up agreement, the representatives must notify us of the impending release or waiver and we will announce the impending release or waiver through a major news service at least two business days before the effective date of the release or waiver.

### **Electronic offer, sale and distribution of shares**

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make Internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

### **Other relationships**

Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

### **Selling restrictions**

No action has been taken in any jurisdiction except the United States that would permit a public offering of our common stock, or the possession, circulation or distribution of this prospectus or any other material relating to us or our common stock in any jurisdiction where action for that purpose is required. Accordingly, the shares may not be offered or sold, directly or indirectly, and neither this prospectus nor any other offering material or advertisements in connection with the shares may be distributed or published, in or from any country or jurisdiction except in compliance with any applicable rules and regulations of any such country or jurisdiction.

### **Canada**

The securities may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

### **United Kingdom**

Each of the underwriters has, separately and not jointly, represented and agreed that:

- it has not made or will not make an offer of the securities to the public in the United Kingdom within the meaning of Section 102B of the Financial Services and Markets Act 2000 (as amended), or the FSMA, except to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority, or FSA;
- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 or in circumstances in which Section 21 of FSMA does not apply to us; and
- it has complied with and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

### **Switzerland**

The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

### **European Economic Area**

In relation to each Member State of the European Economic Area (Iceland, Norway and Lichtenstein in addition to the member states of the European Union) that has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has, separately and not jointly, represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of the securities to the public in that Relevant Member State prior to the publication of a prospectus in relation to the securities that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of the securities to the public in that Relevant Member State at any time:

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than € 43,000,000 and (3) an annual net turnover of more than € 50,000,000, as shown in its last annual or consolidated accounts; and
- in any other circumstances which do not require the publication by the issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

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Each person in a Relevant Member State who receives any communication in respect of, or who acquires any securities under, the offer contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with us and the underwriters that:

- it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and
- in the case of any securities acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (1) the securities acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the underwriters has been given to the offer or resale; or (2) where securities have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those securities to it is not treated under the Prospectus Directive as having been made to such persons.

For the purposes of the provisions in the two immediately preceding paragraphs, the expression an “offer of the securities to the public” in relation to the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

### **United Arab Emirates**

This document has not been reviewed, approved or licensed by the Central Bank of the United Arab Emirates, or UAE, Emirates Securities and Commodities Authority or any other relevant licensing authority in the UAE including any licensing authority incorporated under the laws and regulations of any of the free zones established and operating in the territory of the UAE, in particular the Dubai International Financial Services Authority, or DFSA, a regulatory authority of the Dubai International Financial Centre, or DIFC. The issue of shares of common stock does not constitute a public offer of securities in the UAE, DIFC and/or any other free zone in accordance with the Commercial Companies law, Federal Law No. 8 of 1984 (as amended), DFSA Offered Securities Rules and the Dubai International Financial Exchange Listing Rules, accordingly or otherwise.

The shares may not be offered to the public in the UAE and/or any of the free zones including, in particular, the DIFC. The shares may be offered and this document may be issued, only to a limited number of investors in the UAE or any of its free zones (including, in particular, the DIFC) who qualify as sophisticated investors under the relevant laws and regulations of the UAE or the free zone concerned. Management of the company and the representatives of the underwriters represent and warrant the shares will not be offered, sold, transferred or delivered to the public in the UAE or any of its free zones.

### **Israel**

In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728 – 1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728 – 1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions, or the Addressed Investors; or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728 – 1968, subject to certain conditions, or the Qualified Investors. The Qualified Investors shall not be taken into

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account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728 – 1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728 – 1968. In particular, we may request, as a condition to be offered common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728 – 1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728 – 1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728 – 1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock; (iv) that the shares of common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728 – 1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728 – 1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor's name, address and passport number or Israeli identification number.

### ***Notice to prospective investors in Russia***

The shares to which this prospectus relates will not be offered, advertised, transferred or sold as part of their initial distribution or at any time thereafter to or for the benefit of any persons (including legal entities) resident, incorporated, established or having their usual residence in Russia or to any person located within the territory of Russia who is not a qualified investor in accordance with Russian law unless and to the extent otherwise permitted under Russian law.

This prospectus should not be considered as a public offer or advertisement of the shares to which this prospectus relates in Russia and is not an offer, or an invitation to make offers, to purchase any such shares in Russia. Neither the shares nor any prospectus or other document relating to them have been registered with the Federal Service for Financial Markets of the Russian Federation and are not intended for "placement" or "public circulation" in Russia.

## Legal matters

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C., Boston, Massachusetts. Certain legal matters in connection with this offering will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

## Experts

The financial statements as of December 31, 2015 and December 31, 2016, and for each of the two years in the period ended December 31, 2016 included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## Where you can find more information

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act that registers the shares of our common stock to be sold in this offering. This prospectus does not contain all the information contained in the registration statement and the exhibits and schedules filed as part of the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedules filed as part of the registration statement. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copies of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

Upon the consummation of this offering, we will file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You can read our SEC filings, including the registration statement, at the SEC's website at [www.sec.gov](http://www.sec.gov).

You may read and copy this information at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549, at prescribed rates. You may obtain information regarding the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Our website address is [www.g1therapeutics.com](http://www.g1therapeutics.com). The information contained in, and that can be accessed through, our website is not incorporated into and shall not be deemed to be part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

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## Report of independent auditors

To the Board of Directors and Shareholders of G1 Therapeutics, Inc.:

In our opinion, the accompanying balance sheets and the related statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders' deficit and of cash flows present fairly, in all material respects, the financial position of G1 Therapeutics, Inc. as of December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit 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 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

Raleigh, North Carolina  
February 9, 2017



# G1 Therapeutics, Inc.

## Balance sheets

	2015	December 31, 2016	Pro forma December 31, 2016 (unaudited)
<b>Assets</b>			
Current assets			
Cash and cash equivalents	\$ 22,937,720	\$ 47,304,820	\$ 47,304,820
Prepaid expenses and other assets	812,020	596,228	596,228
Total current assets	23,749,740	47,901,048	47,901,048
Property and equipment, net	146,885	310,873	310,873
Total assets	\$ 23,896,625	\$ 48,211,921	\$ 48,211,921
<b>Liabilities, Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity</b>			
Current liabilities			
Accounts payable	\$ 1,128,652	\$ 2,604,799	\$ 2,604,799
Accrued expenses	953,723	2,853,284	2,853,284
Warrant liability	84,998	167,229	—
Series B Purchase Option Liability	—	—	—
Total current liabilities	2,167,373	5,625,312	5,458,083
Commitments and contingencies (Note 6)			
Series C redeemable convertible preferred stock \$0.0001 par value, 17,000,000 shares authorized, 0 and 16,828,217 issued and outstanding on December 31, 2015 and December 31, 2016, respectively; (liquidation preference of \$0 and \$51,673,017 on December 31, 2015 and December 31, 2016, respectively) no shares issued and outstanding as of December 31, 2016 pro forma (unaudited)	—	51,424,101	—
Series B redeemable convertible preferred stock \$0.0001 par value, 23,000,000 shares authorized, 22,928,234 issued and outstanding on December 31, 2015 and December 31, 2016; (liquidation preference of \$34,058,869 and \$35,721,968 on December 31, 2015 and December 31, 2016, respectively) no shares issued and outstanding as of December 31, 2016 pro forma (unaudited)	38,691,923	40,355,023	—
Series A redeemable convertible preferred stock \$0.0001 par value, 14,996,692 shares authorized, 14,996,692 issued and outstanding on December 31, 2015 and December 31, 2016; (liquidation preference of \$13,801,167 and \$14,431,027 on December 31, 2015 and December 31, 2016, respectively) no shares issued and outstanding as of December 31, 2016 pro forma (unaudited)	13,801,166	14,431,027	—
Series 1 redeemable convertible preferred stock, \$0.0001 par value, 2,112,025 shares authorized, 2,046,091 issued and outstanding on December 31, 2015 and December 31, 2016; (liquidation preference of \$930,971 and \$1,369,998 on December 31, 2015 and December 31, 2016, respectively) no shares issued and outstanding as of December 31, 2016 pro forma (unaudited)	930,971	1,369,998	—
Stockholders' (deficit) equity			
Common stock, \$0.0001 par value, 73,000,000 shares authorized, 4,461,687 shares issued and 4,381,687 shares outstanding on December 31, 2015, and 4,514,873 shares issued and 4,434,873 shares outstanding on December 31, 2016; 73,000,000 shares authorized, 61,314,107 shares issued and 61,234,107 shares outstanding as of December 31, 2016 pro forma (unaudited)	446	451	6,131
Treasury stock, 80,000 shares	(8,000)	(8,000)	(8,000)
Additional paid-in capital	—	—	107,741,698
Accumulated deficit	(31,687,254)	(64,985,991)	(64,985,991)
Total stockholders' (deficit) equity	(31,694,808)	(64,993,540)	42,753,838
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	\$ 23,896,625	\$ 48,211,921	\$ 48,211,921

## G1 Therapeutics, Inc.

### Statements of operations and comprehensive loss

	Year ended December 31,	
	2015	2016
Grant revenue	\$ 522,431	\$ —
Operating expenses		
Research and development	12,730,335	25,161,300
General and administrative	3,215,803	5,229,640
Total operating expenses	15,946,138	30,390,940
Operating loss	(15,423,707)	(30,390,940)
Other income (expenses)		
Other income	17,781	182,372
Change in fair value in warrant liability and other liabilities	(84,998)	(82,231)
Change in fair value of Series B purchase option liability	(4,772,509)	—
Total other income (expense), net	(4,839,726)	100,141
Net loss	\$ (20,263,433)	\$ (30,290,799)
Accretion of redeemable convertible preferred stock (Note 7)	(1,426,740)	(4,405,007)
Net loss attributable to common stockholders	\$ (21,690,173)	\$ (34,695,806)
Basic and diluted net loss per share	\$ (5.38)	\$ (7.78)
Weighted average shares outstanding, basic and diluted	4,033,772	4,460,986
Pro forma basic and diluted net loss per share (Note 9) (unaudited)		\$ (0.54)
Pro forma weighted-average basic and diluted shares outstanding (Note 9) (unaudited)		55,647,597

The accompanying notes are an integral part of these financial statements.

## G1 Therapeutics, Inc. Statements of redeemable convertible preferred stock and stockholders' deficit

	Preferred stock series C		Preferred stock series B		Preferred stock series A		Preferred stock series 1		Common stock		Treasury stock		Additional paid-in capital	Accumulated deficit	Total shareholders' deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
<b>Balance at December 31, 2014</b>	—	\$ —	—	\$ —	14,996,692	\$13,171,305	2,046,091	\$ 930,971	3,821,514	\$ 382	(80,000)	\$ (8,000)	2,945	\$ (10,623,241)	\$ (10,627,914)
Issuance of Series B redeemable convertible preferred stock	—	—	22,928,234	33,261,990	—	—	—	—	—	—	—	—	—	—	—
Allocation of Series B proceeds to Series B purchase option liability	—	—	—	(1,934,955)	—	—	—	—	—	—	—	—	—	—	—
Accretion of redeemable, convertible preferred stock	—	—	—	796,879	—	629,861	—	—	—	—	—	—	(626,160)	(800,580)	(1,426,740)
Exercise of common stock options	—	—	—	—	—	—	—	—	494,173	49	—	—	53,355	—	53,404
Exercise of common stock warrants	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	388,835	—	388,835
Stock financing costs	—	—	—	(139,455)	—	—	—	—	—	—	—	—	—	—	—
Issuance of common shares for license agreement	—	—	—	—	—	—	—	—	146,000	15	—	—	181,025	—	181,040
Exercise of Series B purchase option liability	—	—	—	6,707,464	—	—	—	—	—	—	—	—	—	—	—
Net loss during year	—	—	—	—	—	—	—	—	—	—	—	—	—	(20,263,433)	(20,263,433)
<b>Balance at December 31, 2015</b>	—	\$ —	22,928,234	\$38,691,923	14,996,692	\$13,801,166	2,046,091	\$ 930,971	4,461,687	\$ 446	(80,000)	\$ (8,000)	\$ —	\$ (31,687,254)	\$ (31,694,808)
Issuance of Series C redeemable convertible preferred stock	16,828,217	49,999,998	—	—	—	—	—	—	—	—	—	—	—	—	—
Accretion of redeemable, convertible preferred stock	—	1,673,019	—	1,663,100	—	629,861	—	439,027	—	—	—	—	(1,397,069)	(3,007,938)	(4,405,007)
Exercise of common stock options	—	—	—	—	—	—	—	—	53,186	5	—	—	6,514	—	6,519
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	1,390,555	—	1,390,555
Stock financing costs	—	(248,916)	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of common shares for license agreement	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Net loss during year	—	—	—	—	—	—	—	—	—	—	—	—	—	(30,290,799)	(30,290,799)
<b>Balance at December 31, 2016</b>	16,828,217	\$51,424,101	22,928,234	\$40,355,023	14,996,692	\$14,431,027	2,046,091	\$1,369,998	4,514,873	\$ 451	(80,000)	\$ (8,000)	\$ —	\$ (64,985,991)	\$ (64,993,540)

The accompanying notes are an integral part of these financial statements.

## G1 Therapeutics, Inc. Statements of cash flows

	Year ended December 31,	
	2015	2016
<b>Cash flows from operating activities</b>		
Net loss	\$ (20,263,433)	\$ (30,290,799)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation and amortization	42,266	67,226
Stock-based compensation	388,835	1,390,555
Purchase of license agreement	181,040	—
Gain/loss on disposal of PPE	1,579	18,527
Increase in fair value of warrant activity	84,998	82,231
Increase in fair value of Series B purchase option liability	4,772,509	—
Change in operating assets and liabilities		
Prepaid expenses and other assets	(787,516)	215,792
Accounts payable and accrued expenses	1,734,736	3,375,709
Net cash used in operating activities	(13,844,986)	(25,140,759)
<b>Cash flows by investing activities</b>		
Purchases of property and equipment	(87,263)	(249,742)
Net cash used in investing activities	(87,263)	(249,742)
<b>Cash flows from financing activities</b>		
Proceeds from stock options and warrants exercised	53,405	6,519
Proceeds from Series C preferred stock	—	49,999,998
Proceeds from Series B preferred stock	33,261,990	—
Stock financing costs	(139,455)	(248,916)
Net cash provided by financing activities	33,175,940	49,757,601
Net change in cash and cash equivalents	19,243,691	24,367,100
<b>Cash and cash equivalents</b>		
Beginning of year	3,694,029	22,937,720
Ending of year	\$ 22,937,720	\$ 47,304,820
<b>Non-cash investing and financing activities</b>		
Accretion of redeemable convertible preferred stock	1,426,740	4,405,007
Exercise of Series B purchase option	6,707,464	—
Common stock issued for patent rights	181,040	—

The accompanying notes are an integral part of these financial statements.

# G1 Therapeutics, Inc.

## Notes to financial statements

### 1. Description of business

G1 Therapeutics, Inc. (the "Company") is a privately held clinical-stage biopharmaceutical company based in Research Triangle Park, North Carolina that focuses on the discovery and development of novel therapeutics for the treatment of cancer. The Company was incorporated on May 19, 2008 in the state of Delaware.

The Company focuses on cyclin-dependent kinases (CDKs), a family of proteins that plays an important role in the growth and proliferation of all human cells. The Company has focused its CDK research on developing potent and selective inhibitors of the kinases CDK4 and CDK6, collectively known as CDK4/6. The Company is currently advancing two CDK4/6 inhibitor product candidates that each have broad applicability across multiple cancer indications.

Trilaciclib, the Company's most advanced clinical-stage candidate, is a potential first-in-class intravenous CDK4/6 inhibitor designed to preserve hematopoietic stem cells and enhance immune system function during chemotherapy. Based on compelling response rates and favorable tolerability shown in early-stage trials, trilaciclib is currently being evaluated in three randomized Phase 1b/2a trials: two in patients with small cell lung cancer, or SCLC, and one Phase 2 in patients with triple-negative breast cancer, or TNBC.

G1T38, the Company's second clinical-stage candidate, is a potential best-in-class oral CDK4/6 inhibitor, to be used in combination with other targeted therapies to treat multiple cancers. A Phase 1 trial of G1T38 in 75 healthy volunteers showed a favorable safety profile, and the Company initiated a Phase 1/2 trial in ER+, HER2- breast cancer in January 2017. The Company's plans for G1T38 include future combinations in other cancers, such as non-small cell lung cancer, or NSCLC.

As part of the Company's strategy to develop wholly-owned proprietary combinations, the Company has exclusively in-licensed G1T48, a potential first/best-in-class oral selective estrogen receptor degrader, or SERD. The Company expects to initially develop G1T48 to be used in combination with G1T38 for the treatment of ER+, HER2- breast cancer.

The Company plans to continue to leverage its proprietary assets and knowledge of CDK4/6 biology to explore additional combination treatments and to build a fully integrated oncology company.

The Company's financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. As of December 31, 2016, the Company had an accumulated deficit of \$64,985,991. The Company has reported a net loss in all fiscal periods since inception and expects to incur substantial losses in the future to conduct research and development and pre-commercialization activities. These factors raise substantial doubt about its ability to continue as a going concern. The Company's management plans to raise additional funds through equity financings or generate revenues from collaborative partnerships prior to the commercialization of the Company's product candidates. If the Company is unable to raise additional funds, management plans to halt the planned increases to research and development and general and administrative costs until such time as additional funds can be obtained. The accompanying financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

There can be no assurance that the Company will be able to obtain additional debt or equity financing or generate revenues from collaborative partners on terms acceptable to the Company, on a timely basis, or at all.

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The failure of the Company to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on the Company's results of operations and financial condition. Additionally, there is no assurance that the Company can achieve its technical milestones, or that its intellectual property rights will not be challenged.

## **2. Summary of significant accounting policies**

### **Basis of presentation**

The Company has prepared the accompanying financial statements in conformity with generally accepted accounting principles in the United States of America ("U.S. GAAP").

### **Unaudited pro forma information**

The accompanying unaudited pro forma balance sheet as of December 31, 2016 assumes the automatic conversion of the Series 1, A, B and C redeemable convertible preferred stock into 56,799,234 shares of common stock and the conversion of a warrant to purchase 65,934 shares of Series 1 redeemable convertible preferred stock into a warrant to purchase 65,934 shares of common stock upon the completion of an initial public offering.

In the accompanying statements of operations and comprehensive loss, unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2016 have been prepared to give effect to the automatic conversion of all outstanding shares of redeemable convertible preferred stock into common stock and the reclassification of the warrant liability to additional paid-in capital, as though the proposed initial public offering had occurred at the beginning of the period presented or the issuance date of the redeemable convertible preferred stock, if later.

### **Use of estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates. These estimates include the Company's common stock valuation, warrant valuation and deferred tax asset valuation allowance.

### **Cash and cash equivalents**

The Company considers all highly liquid investments purchased with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents at December 31, 2016 consist of amounts on deposit in banks, including checking accounts, money market accounts and certificates of deposit. Cash deposits are all in financial institutions in the United States.

### **Concentration of credit risk**

Financial instruments that potentially subject the Company to credit risk consist of cash and cash equivalents. Deposits with financial institutions are insured, up to certain limits, by the Federal Deposit Insurance Corporation ("FDIC"). The Company's cash deposits often exceed the FDIC insurance limit; however, all deposits are maintained with high credit quality institutions and the Company has not experienced any losses in such accounts. The financial condition of financial institutions is periodically reassessed, and the Company believes the risk of any loss is minimal. The Company believes the risk of any loss on cash due to credit risk is minimal.

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### **Property and equipment**

Property and equipment are stated at cost less accumulated depreciation. Depreciation is generally calculated using the straight-line method over the following estimated useful lives:

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Computer equipment	5 years
Laboratory equipment	5 years
Furniture and fixtures	7 years
Leasehold improvements	7 years

---

Costs associated with maintenance and repairs are charged to expense as incurred. Property and equipment held under leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset.

### **Impairment of long-lived assets**

The Company evaluates its long-lived assets for indicators of possible impairment by comparison of the carrying amounts to future net undiscounted cash flows expected to be generated by such assets when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Should an impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset's fair value based on discounted estimates of future cash flows. For the years ended December 31, 2015 and December 31, 2016, the Company's management evaluated its long-lived assets and determined no impairment charge was needed.

### **Warrant liability**

Warrants to purchase the Company's redeemable convertible preferred stock are classified as liabilities and are recorded at their estimated fair value. In each reporting period, any change in fair value of the warrants is recorded as expense in the case of an increase in fair value and income in the case of a decrease in fair value.

### **Series B purchase option liability**

The option to purchase shares of Series B redeemable convertible preferred stock in the second tranche has been accounted for as a free-standing instrument and classified as a liability. On February 4, 2015, upon purchase of the first tranche of Series B Preferred Stock, the option to purchase additional shares was recorded at its fair value, with the remaining cash proceeds received on that date allocated to Series B Preferred Stock. As the value of the option to purchase shares in the second tranche increased over time, a change in the fair value of the liability was recorded as "Change in fair value of Series B purchase option liability" in the accompanying statement of operations. This free-standing instrument was exercised on December 10, 2015 when the holders exercised their right to require the purchase of the second tranche shares by the holders of the outstanding shares of Series B Preferred Stock resulting in an outstanding liability of \$0 on December 31, 2015.

### **Research and development**

Research and development expenses consist of costs incurred to further the Company's research and development activities and include salaries and related employee benefits, manufacturing of pharmaceutical active ingredients and drug products, costs associated with clinical trials, nonclinical activities, regulatory activities, research-related overhead expenses and fees paid to expert consultants, external service providers

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and contract research organizations which conduct certain research and development activities on behalf of the Company. Costs incurred in the research and development of products are charged to research and development expense as incurred.

Each reporting period, the Company estimates and accrues expenses, the largest of which is related to accrued research and development expenses. This process involves reviewing contracts and purchase orders, identifying services that have been performed on the Company's behalf, and estimating the level of service performed and the associated cost incurred for the service when the Company has not yet been invoiced or otherwise notified of the actual costs.

Costs for preclinical studies and clinical trial activities are recognized based on an evaluation of vendors' progress towards completion of specific tasks, using data such as patient enrollment, clinical site activations or information provided by vendors regarding their actual costs incurred. Payments for these activities are based on the terms of individual contracts and payment timing may differ significantly from the period in which the services were performed. The Company determines accrual estimates through reports from and discussions with applicable personnel and outside service providers as to the progress or state of completion of trials, or the services completed. The estimates of accrued expenses as of each balance sheet date are based on the facts and circumstances known at the time.

### **Revenue recognition**

The Company received the majority of its revenues from grant programs authorized by Congress through the Small Business Innovation Research (SBIR) program and the Small Business Technology Transfer Act (STTR) of 1992. In addition, the Company was also awarded grant funds through other federal and state programs related to its research. Under the terms of the grants, the Company is entitled to receive reimbursement of its allowable direct expenses, allocated overhead and general and administrative expenses.

Revenue received under these grant programs is recognized as direct project costs are incurred plus a portion of the Company's indirect costs such as overhead and general and administrative expenses allocated to the project. The Company's grant agreements are fixed fee arrangements.

In the event that the granting agency provides advance funding of a grant award, the Company records deferred revenues and then recognizes revenue as costs are incurred over the life of the grant.

To date, the Company has not generated any revenue from the commercial sale of its product candidates.

### **Fair value of financial instruments**

The Company provides disclosure of financial assets and financial liabilities that are carried at fair value based on the price that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements may be classified based on the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities using the following three levels:

- Level 1      Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2      Inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3      Unobservable inputs that reflect the Company's estimates of the assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.



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The carrying amounts of cash, cash equivalents, accounts payable and accrued liabilities approximate fair value because of their short-term nature.

At December 31, 2015 and December 31, 2016, these financial instruments and respective fair values have been classified as follows:

	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant other unobservable inputs (Level 3)	Balance at December 31, 2015
<b>Assets</b>				
Money market funds	\$ 22,425,174	\$ —	\$ —	\$ 22,425,174
<b>Total assets at fair value:</b>	<b>\$ 22,425,174</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 22,425,174</b>
<b>Liabilities:</b>				
Warrant Liability	\$ —	\$ —	\$ 84,998	\$ 84,998
<b>Total liabilities at fair value:</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 84,998</b>	<b>\$ 84,998</b>

	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant other unobservable inputs (Level 3)	Balance at December 31, 2016
<b>Assets</b>				
Money market funds	\$ 31,730,289	\$ —	\$ —	\$ 31,730,289
Certificates of Deposit	15,040,423	—	—	15,040,423
<b>Total assets at fair value:</b>	<b>\$ 46,770,712</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 46,770,712</b>
<b>Liabilities:</b>				
Warrant Liability	\$ —	\$ —	\$ 167,229	\$ 167,229
<b>Total liabilities at fair value:</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 167,229</b>	<b>\$ 167,229</b>

The change in the fair value measurement using significant inputs (Level 3) is summarized below:

<b>Balance at December 31, 2014</b>	<b>\$ —</b>
Change in fair value in warrant liability	84,998
Allocation of Series B proceeds to Series B purchase option liability	1,934,955
Change in fair value of Series B purchase option liability	4,772,509
Exercise of Series B Purchase option	<u>(6,707,464)</u>
<b>Balance at December 31, 2015</b>	<b>\$ 84,998</b>
Change in fair value in warrant liability	<u>82,231</u>
<b>Balance at December 31, 2016</b>	<b>\$ 167,229</b>

### **Patent costs**

Costs associated with the submission of patent applications are expensed as incurred given the uncertainty of the future economic benefits of the patents. Patent-related legal expenses included in general and administrative costs were approximately \$690,710 for the year ended December 31, 2015 and \$1,034,240 for the year ended December 31, 2016.

### **Income taxes**

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statements carrying amounts of assets and liabilities and their respective tax bases, operating loss carryforwards, and tax 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. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

In accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 740, *Accounting for Income Taxes*, the Company reflects in the financial statements the benefit of positions taken in a previously filed tax return or expected to be taken in a future tax return only when it is considered 'more-likely-than-not' that the position taken will be sustained by a taxing authority. As of December 31, 2015 and 2016, the Company had no unrecognized income tax benefits and correspondingly there is no impact on the Company's effective income tax rate associated with these items. The Company's policy for recording interest and penalties relating to uncertain income tax positions is to record them as a component of income tax expense in the accompanying statements of operations. As of December 31, 2015 and 2016, the Company had no such accruals.

### **Stock-based compensation**

The primary type of stock-based payments utilized by the Company are stock options. The Company accounts for stock-based employee compensation arrangements by measuring the cost of employee services received in exchange for all equity awards granted based on the fair value of the award on the grant date. The fair value of each employee stock option is estimated on the date of grant using an options pricing model. The Company currently uses the Black-Scholes valuation model to estimate the fair value of its share-based payments. The model requires management to make a number of assumptions including expected volatility, expected life, risk-free interest rate and expected dividends.

The Company accounts for stock-based non-employee compensation arrangements by recording the expense of such services based on the fair value of the equity instrument as estimated using the Black-Scholes pricing model. The fair value of the equity instrument is charged to operating expense over the term of the service agreement.

### **Segment information**

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. All of the Company's assets are held in the United States.

### **Comprehensive loss**

Comprehensive loss includes net loss as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. There was no difference between net loss and comprehensive loss for each of the periods presented in the accompanying financial statements.

### **Redeemable convertible preferred stock**

The Company classifies its redeemable convertible preferred stock, for which the Company does not control the redemption, outside of permanent equity. The Company records redeemable convertible preferred stock at fair value upon issuance, net of any offering costs, and the carrying value is adjusted to the redemption value at the end of each reporting period. These adjustments are effected through charges against additional paid-in capital and accumulated deficit.

### **New accounting standards**

In October 2016, the FASB issued ASU No. 2016-17, *Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control*, which amends the consolidation guidance on how a reporting entity that is a single decision maker of a variable interest entity should treat indirect interest in the entity held through related parties that are under common control. This guidance is effective for annual periods beginning after December 15, 2016, including interim periods within those annual periods, with early adoption permitted. The Company is currently evaluating the impact of the adoption of this ASU on the Company's financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. The FASB issued ASU 2016-09 to improve U.S. GAAP by providing guidance on the cash flow statement classification of eight specific areas where there is existing diversity in practice. The FASB expects that the guidance in this ASU will reduce the current and potential future diversity in practice in such areas. This ASU is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company is currently evaluating the impact of the adoption of this ASU on the Company's financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The FASB issued ASU 2016-09 to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences. This ASU is effective for annual and interim periods ending after December 15, 2016, with early adoption permitted. This ASU was adopted by the Company for the year ended December 31, 2016. The adoption of this standard did not have a material impact on its financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This guidance revises the accounting related to leases by requiring lessees to recognize a lease liability and a right-of-use asset for all leases. The new lease guidance also simplifies the accounting for sale and leaseback transactions. This ASU is effective for annual reporting periods beginning after December 15, 2018 and early adoption is permitted. The Company is currently evaluating the impact of the adoption of this ASU on the Company's financial statements.

In November 2014, the FASB issued ASU No. 2014-16, *Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity*. The guidance requires an entity to determine the nature of the host contract by considering all stated and implied substantive terms and features of the hybrid financial instrument, weighing each term and feature on the basis of the relevant facts and circumstances (commonly referred to as the whole-instrument approach). ASU 2014-16 applies to all entities and is effective for annual periods beginning after December 15, 2015, and interim periods thereafter. The ASU was adopted by the Company for the year ended December 31, 2016. Adoption of this standard did not have material impact on its financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, requiring

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management to evaluate whether events or conditions could impact an entity's ability to continue as a going concern for at least one year after the date that the financial statements are issued and to provide disclosures if necessary. Disclosures will be required if conditions give rise to substantial doubt and the type of disclosure will be determined based on whether management's plans will be able to alleviate the substantial doubt. The ASU will be effective for the first annual period ending after December 15, 2016, and for annual periods and interim periods thereafter with early application permitted. The ASU was adopted by the Company for the year ended December 31, 2016. Adoption of this standard did not have material impact on its financial statements.

In June 2014, the FASB issued ASU No. 2014-12, *Compensation – Stock Compensation (Topic 718): Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could be Achieved* after the Requisite Service Period, which requires the Company to assess share-based awards with performance targets that could be achieved after the requisite service period for potential treatment as performance conditions. Under the ASU, compensation expense is to be recognized when the performance target is deemed probable and should represent the compensation expense attributable to the periods for which service has already been rendered. If the performance target is reached prior to achievement of the service period, the remaining unrecognized compensation cost should be recognized over the remaining service period. The ASU is effective for annual and interim periods beginning after December 15, 2015 with early adoption permitted. This ASU was adopted by the Company for the year ended December 31, 2016. The adoption of this standard did not have a material impact on its financial statements.

In May 2014, the FASB and the International Accounting Standards Board jointly issued ASU No. 2014-09, *Revenue from Contracts with Customers*, which supersedes the revenue recognition requirements in ASC 605 and most industry-specific guidance. The new standard requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. The update also requires additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgements and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for public entities for annual and interim periods within those annual periods beginning after December 15, 2017. The Company is evaluating the method of adoption and the potential impact this standard may have on its financial position and results of operations.

### 3. Property and equipment

Property and equipment consists of the following:

	Year ended, December 31,	
	2015	2016
Computer equipment	\$ 29,482	\$ 66,865
Laboratory equipment	129,968	206,844
Furniture and fixtures	22,427	64,203
Leasehold improvements	34,410	80,210
Accumulated depreciation	(69,402)	(107,249)
Property and equipment, net	\$146,885	\$ 310,873

Depreciation expenses relating to property and equipment were \$42,266 and \$67,226 for the years ended December 31, 2015 and 2016, respectively.

#### 4. Patent license agreement

On November 23, 2016, the Company entered into a license agreement with the Board of Trustees of the University of Illinois (the University) whereby the University licensed patent rights to the Company, with rights of sublicense, to make, have made, use, import, sell and offer for sale products covered by certain patent rights owned by the University. The rights licensed to the Company are exclusive, worldwide, non-transferable rights, for all fields of use. Under the terms of the agreement the Company paid a one-time only, non-refundable license issue fee in the amount of \$500,000 which was charged to research and development expense in the fourth quarter of 2016.

The Company is also obligated to pay annual maintenance fees to the University. All annual minimum payments are fully creditable against any royalty payments made by the Company. Under the terms of the agreement, the Company must pay the University a royalty percentage on all net sales of products and a share of sublicensing revenues. The University is eligible to receive milestone payments of up to \$2.625 million related to the initiation and execution of clinical trials and first commercial sale of a product in multiple countries. The Company is also responsible for all future patent prosecution costs.

The term of the license agreement will continue until the later of (i) the expiration of the last valid claim within the patent rights covering the product in such country, (ii) the expiration of market exclusivity in such country and (iii) the 10th anniversary of the first commercial sale in such country. The University may terminate the agreement in the event (i) the Company fails to pay any amount or make any report when required to be made and fails to cure such failure within thirty (30) days after receipt of notice from the University, (ii) is in breach of any provision of the agreement and fails to remedy within forty-five (45) days after receipt of notice, (iii) makes a report to the University under the agreement that is determine to be materially false, (iv) declares insolvency or bankruptcy or (v) takes an action that causes patent rights or technical information to be subject to lien or encumbrance and fails to remedy any such breach within forty-five (45) days of receipt of notice from the University. The Company may terminate the agreement at any time on written notice to the University at least ninety (90) days prior to the termination date specified in the notice. Upon expiration or termination of the agreement, all rights revert to the University.

On December 31, 2015 the Company entered into a non-exclusive, royalty-free license agreement for patent rights. As consideration for the patent rights, the Company issued 146,000 shares of common stock with a fair value of \$181,040, and agreed to pay past and future patent prosecution costs related to the countries in which valid claims have or will have issued. The aggregate fair value of all consideration paid was expensed as a research and development cost in 2015.

#### 5. Accrued expenses

Accrued expenses are comprised of the following as of:

	Year ended, December 31,	
	2015	2016
Accrued professional fees	\$ 448,500	\$ 295,158
Accrued clinical and preclinical study costs	211,000	1,897,346
Accrued compensation expense	279,442	617,350
Deferred rent	14,781	43,430
Accrued expenses	\$ 953,723	\$ 2,853,284

## 6. Lease obligations

### Operating lease commitments

Pursuant to a lease dated January 10, 2014, on April 1, 2014, the Company leased office and lab space under a lease agreement for \$5,946 per month with a free rent period and escalating rent payments; the lease was set to expire on July 31, 2017.

On January 27, 2016, the company signed an amendment to the Company's existing lease to move to a larger office and lab space beginning in August 2016 for \$16,277 per month with a discounted rent period and escalating rent payments; the lease was extended to December 31, 2022. The amendment also contained an option for a five year renewal and a right of first refusal to lease adjacent office space.

Rent expense amounted to \$71,352 and \$125,660 for the years ended December 31, 2015 and December 31, 2016, respectively.

The following is a schedule by years of minimum future rentals on noncancelable operating leases:

2017	\$	173,346
2018	\$	203,694
2019	\$	209,805
2020	\$	216,099
2021	\$	222,582
2022	\$	229,259
	\$	1,254,785

## 7. Capitalization

### Redeemable convertible preferred stock

The Company has determined that the Series C, Series B, Series A and Series 1 redeemable convertible preferred stock are redeemable, after a stated period of time, based on voting thresholds that vary by shareholder class, as outlined in the Company's certificate of incorporation. The Company classifies its redeemable convertible preferred stock outside of permanent equity and into mezzanine equity.

The Company records its redeemable convertible preferred stock at fair value upon issuance, net of any issuance costs or discounts, and the carrying value is increased by periodic accretion to its redemption value until the earliest possible date of redemption. These increases are recorded as charges against additional paid-in-capital until the additional paid-in-capital balance is reduced to zero. At that time, additional accretion adjustments are recorded as additions to accumulated deficit.

In November 2012, the Company issued warrants to purchase 65,934 shares of its Series 1 redeemable convertible preferred stock. The fair value of the warrants was determined using a combination of both the option pricing model and the probability weighted expected return method and was recorded as a liability. The change in the fair value of the warrant liability in the year ended December 31, 2015 and 2016 was \$84,998 and \$82,231, respectively, and has been recorded as "Change in the fair value in warrant liability" in the accompanying statement of operations. The Company used significant assumptions in estimating fair value of the warrant liability including volatility, risk free interest rate, estimated fair value of the redeemable convertible preferred stock and the estimated life of the warrant.

In 2013, the Company issued 80,500 shares of Series 1 redeemable convertible preferred stock for a total of \$36,627 in exchange for consulting and professional services.

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In April 2013, the Company entered into a bridge financing agreement that was amended in July and August 2013 for total advances up to \$1,250,000. In conjunction with this bridge financing agreement, the Company issued warrants to purchase 583,862 shares of common stock which became immediately exercisable upon execution of the bridge financing agreement. The warrants have a 10 year life and were to expire during 2023. As of December 31, 2013, all shares of common stock have been purchased under the warrants, and there is no outstanding balance on the bridge financing agreement as it was converted into Series A redeemable convertible preferred stock.

The fair value of the warrants upon execution of the bridge financing agreement was determined to be approximately \$68,800, which was recognized as noncash interest expense in 2013. The Company calculated the fair value of the warrants using the Black-Scholes valuation model with the following assumptions: volatility of 97%, dividend rate of 0%, risk-free interest rate of 2.99% and a warrant life of 10 years.

In October 2013, the Company authorized the issuance of up to 17,108,717 shares of its preferred stock, of which 2,112,025 was to be designated as Series 1 redeemable convertible preferred stock and 14,996,692 as Series A redeemable convertible preferred stock. At this time, the Company also issued 7,509,696 shares of its Series A redeemable convertible preferred stock for cash consideration and conversion of promissory notes at a price of \$0.84 per share. Total gross proceeds, including the cancellation of indebtedness of \$1,308,145, amounted to \$6,308,145.

In May 2014, the Company issued 7,486,996 shares of its Series A redeemable convertible preferred stock for cash consideration of \$0.84 per share. Total proceeds, including cancellation of indebtedness of \$39,077, amounted to \$6,289,077.

In February 2015, the Company's Board of Directors and stockholders approved the Fourth Amended and Restated Certification of Incorporation, which increased the authorized number of shares of its redeemable convertible preferred stock to 39,908,717, of which 2,112,025 were designated as Series 1 redeemable convertible preferred stock, 14,996,692 as Series A redeemable convertible preferred stock and 22,800,000 as Series B redeemable convertible preferred stock. At the same time, the Company issued 11,382,087 shares of its Series B redeemable convertible preferred stock for cash consideration and cancellation of indebtedness at a price of \$1.4507 per share. Total proceeds, including cancellation of indebtedness of \$12,000, amounted to \$16,511,995.

In December 2015, the Company approved a Certificate of Amendment to the Fourth Amended and Restated Certification of Incorporation which increased the authorized number of shares of its redeemable convertible preferred stock to 40,108,717, of which 2,112,025 were be designated as Series 1 redeemable convertible preferred stock, 14,996,692 as Series A redeemable convertible preferred stock and 23,000,000 as Series B redeemable convertible preferred stock. At the same time, the Company authorized and issued 11,546,147 shares of its Series B redeemable convertible preferred stock for cash consideration at a price of \$1.4507 per share. Total additional proceeds amounted to \$16,749,995.

In April 2016, the Company's Board of Directors and stockholders approved the Fifth Amended and Restated Certification of Incorporation which increased the authorized number of shares of its redeemable convertible preferred stock to 57,108,717, of which 2,112,025 were be designated as Series 1 redeemable convertible preferred stock, 14,996,692 as Series A redeemable convertible preferred stock, 23,000,000 as Series B redeemable convertible preferred stock and 17,000,000 as Series C redeemable convertible preferred stock. In the second quarter of 2016, the Company authorized and issued 16,828,217 shares of its Series C redeemable convertible preferred stock for cash consideration at a price of \$2.97 per share. Total additional proceeds amounted to \$49,999,998.

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The following is a summary of the rights, preferences and terms of the Company's Series C, Series B, Series A and Series 1 redeemable convertible preferred stock:

### **Voting**

The holders of the redeemable convertible preferred stock are entitled to vote, together with the holders of common stock, on all matters submitted to stockholders for a vote. Each holder of redeemable convertible preferred stock is entitled to the number of votes equal to the number of shares of common stock into which each share of redeemable convertible preferred stock is convertible at the time of such vote.

According to the Fifth Amended and Restated Certificate of Incorporation, the holders of Series C Preferred Stock shall be entitled to elect one director of the Company's Board of Directors. The other seven board members are elected as follows; two by Series B Preferred Stockholders, two by Series A Stockholders, with the remaining three being elected by the Common Stock and preferred stockholders voting as one class.

### **Dividends**

Dividends on the Series C redeemable convertible preferred stock, Series B redeemable convertible preferred stock and Series A redeemable convertible preferred stock are payable simultaneously or prior and in preference to any declaration, payment or set aside of any dividend on the Series 1 redeemable convertible preferred stock or common stock (other than dividends on shares of common stock payable in shares of common stock). A dividend of \$0.149 per annum for each share of Series C redeemable convertible preferred stock has to be accrued but is only payable when, as and if declared by the Board of directors, a dividend of \$0.073 per annum for each share of Series B redeemable convertible preferred stock has to be accrued but is payable only when, as and if declared by the Board of Directors and a dividend of \$0.042 per annum for each share of Series A redeemable convertible preferred stock has to be accrued but is payable only when, as and if declared by the Board of Directors (the "Accruing Dividends").

Any additional dividend declared after the payment in full of the Accruing Dividends shall be distributed among all of the holders of preferred and common stock in proportion to the number of shares common stock that would be held by each holder if all shares of redeemable convertible preferred stock were converted to common stock.

### **Liquidation**

In the event of a sale, lease, transfer, exclusive license, conveyance or other disposition of all or substantially all of the Company's assets or all or substantially all of the Company's intellectual property (unless at least a majority of the then outstanding redeemable convertible preferred stock, 65% of the then outstanding shares of Series C redeemable convertible preferred stock and 60% of the then outstanding shares of Series B redeemable convertible preferred stock elect otherwise), or the acquisition of the Company by another entity, group or person (unless at least a majority of the then outstanding redeemable convertible preferred stock, 65% of the then outstanding Series C redeemable convertible preferred stock holders and 60% of the then outstanding Series B redeemable convertible preferred stock holders elect otherwise), or the liquidation, dissolution or winding up of the Company (each, a "Liquidation Event"), holders of Series C redeemable convertible preferred stock shall be entitled to receive, prior and in preference to the holders of Series B redeemable convertible preferred stock, Series A redeemable convertible preferred stock, Series 1 redeemable convertible preferred stock, common stock and any other class of capital stock ranking junior to the Series C redeemable convertible preferred stock, an amount equal to the original purchase price plus any accrued but unpaid dividends minus any Special Distribution (as defined in the Company's Fifth Amended and Restated



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Certificate of Incorporation, as amended) (the "Series C Liquidation Preference Amount"). Notwithstanding the foregoing, in no event shall the Series C Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the Series C Liquidation Preference Amount, the assets will be distributed ratably among the holders of the Series C redeemable convertible preferred stock in proportion to the full amount of the Series C Liquidation Preference Amount such holder is otherwise entitled to receive.

After the payment of the Series C Liquidation Preference Amount to the holders of Series C redeemable convertible preferred stock, holders of Series B redeemable convertible preferred stock shall be entitled to receive, prior and in preference to the holders of Series A redeemable convertible preferred stock, Series 1 redeemable convertible preferred stock, common stock and any other class of capital stock ranking junior to the Series B redeemable convertible preferred stock, an amount equal to the original purchase price plus any accrued but unpaid dividends minus any Special Distribution (the "Series B Liquidation Preference Amount"). Notwithstanding the foregoing, in no event shall the Series B Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the Series B Liquidation Preference Amount, the assets will be distributed ratably among the holders of the Series B redeemable convertible preferred stock in proportion to the full amount of the Series B Liquidation Preference Amount such holder is otherwise entitled to receive.

After the payment of the Series B Liquidation Preference Amount to the holders of Series B redeemable convertible preferred stock, holders of Series A redeemable convertible preferred stock shall be entitled to receive, prior and in preference to the holders of Series 1 redeemable convertible preferred stock, common stock and any other class of capital stock ranking junior to the Series A redeemable convertible preferred stock, an amount equal to the original purchase price plus any accrued but unpaid dividends minus any Special Distribution (the "Series A Liquidation Preference Amount"). Notwithstanding the foregoing, in no event shall the Series A Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the Series A Liquidation Preference Amount, the assets will be distributed ratably among the holders of the Series A redeemable convertible preferred stock in proportion to the full amount of the Series A Liquidation Preference Amount such holder is otherwise entitled to receive.

After the payment of the Series B Liquidation Preference Amount and the Series A Liquidation Preference Amount to the holders of Series B redeemable convertible preferred stock and Series A redeemable convertible preferred stock, respectively, the holders of Series 1 redeemable convertible preferred stock shall be entitled to receive, prior and in preference to holders of common stock and any other class of capital stock ranking junior to the Series 1 redeemable convertible preferred stock, an amount equal to the original purchase price for such series of redeemable convertible preferred stock of \$0.455 plus any accrued but unpaid dividends minus any Special Distribution ("Series 1 Liquidation Preference Amount"). Notwithstanding the foregoing, in no event shall the Series 1 Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the Series 1 Liquidation Preference Amount, the assets will be distributed ratably among the holders of the Series 1 redeemable convertible preferred stock in proportion to the full amount of Series 1 Liquidation Preference Amount such holder is otherwise entitled to receive.

Any proceeds remaining after the distribution of the Series C Liquidation Preference Amount in full, Series B Liquidation Preference Amount in full, the Series A Liquidation Preference Amount in full and the Series 1 Liquidation Preference Amount in full to the holders of redeemable convertible preferred stock shall be distributed pro rata to the holders the redeemable convertible preferred stock, assuming full conversion of all such shares, and the holders of common stock.

## Redemption

The holders of at least sixty-five (65%) of the then outstanding shares of Series C redeemable convertible preferred stock may, after April 27, 2022, by delivery of written notice to the Company and all holders of Series C redeemable convertible preferred stock, require the Company to redeem and purchase all outstanding shares of Series C redeemable convertible preferred stock in three equal installments (the first within 90 days of the redemption date, the second on the first anniversary of the redemption date and the third on the second anniversary of the redemption date) at a redemption price equal to the greater of (i) the Series C Liquidation Preference Amount, as defined above, or (ii) the fair market value per share of the Series C redeemable convertible preferred stock as determined by the agreement of the Company and the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C redeemable convertible preferred stock (or an third party appraiser if no agreement can be reached).

The holders of at least sixty percent (60%) of the then outstanding shares of Series B redeemable convertible preferred stock may, at any time after all outstanding shares of Series C redeemable convertible preferred stock have been redeemed, by a vote of and by delivery of written notice to the Company and all holders of Series B redeemable convertible preferred stock, require the Company to redeem and purchase all outstanding shares of Series B redeemable convertible preferred stock in three equal installments (the first within 90 days of the redemption date, the second on the first anniversary of the redemption date and the third on the second anniversary of the redemption date) at a redemption price equal to the greater of (i) the Series B Liquidation Preference Amount, as defined above, or (ii) the fair market value per share of the Series B redeemable convertible preferred stock as determined by the agreement of the Company and the holders of at least sixty-five percent (60%) of the then outstanding shares Series B redeemable convertible preferred stock (or an third party appraiser if no agreement can be reached).

The holders of at least sixty-five percent (65%) of the then outstanding shares of Series A redeemable convertible preferred stock may, at any time after all outstanding shares of Series B redeemable convertible preferred stock have been redeemed, by a vote of and by delivery of written notice to the Company and all holders of Series A redeemable convertible preferred stock, require the Company to redeem and purchase all outstanding shares of Series A redeemable convertible preferred stock in three equal installments (the first within 90 days of the redemption date, the second on the first anniversary of the redemption date and the third on the second anniversary of the redemption date) at a redemption price equal to the greater of (i) the Series A Liquidation Preference Amount, as defined above, or (ii) the fair market value per share of the Series A redeemable convertible preferred stock as determined by the agreement of the Company and the holders of at least sixty-five percent (65%) of the then outstanding shares Series A redeemable convertible preferred stock (or an third party appraiser if no agreement can be reached).

The holders of a majority of the then outstanding shares of Series 1 redeemable convertible preferred stock may, any time after all outstanding shares of Series A redeemable convertible preferred stock have been redeemed, by delivery of written notice to the Company and all holders of Series 1 redeemable convertible preferred stock, require the Company to redeem and purchase all outstanding shares the Series 1 redeemable convertible preferred stock in three equal installments (the first within 90 days of the redemption date, the second on the first anniversary of the redemption date and the third on the second anniversary of the redemption date) at a redemption price equal to the greater of (i) the Series 1 Liquidation Preference Amount, as defined above, or (ii) the fair market value per share of the Series 1 redeemable convertible preferred stock as determined by the agreement of the Company and the holders of at least a majority of the then outstanding shares of Series 1 redeemable convertible preferred stock (or an third party appraiser if no agreement can be reached).

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The Company may redeem the redeemable convertible preferred stock from any source of funds legally available on the applicable redemption date. If no funds or insufficient funds are legally available on the applicable redemption date, the Company shall redeem a pro rata portion of each holder's redeemable shares of such series of redeemable convertible preferred stock out of funds legally available, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the legally available funds were sufficient to redeem all such shares. The remaining shares shall be redeemed as soon as practicable after the Company has funds legally available. The redeemable convertible preferred stock that has not yet been redeemed shall continue to have the rights, benefits and privileges associated with such series of redeemable convertible preferred stock.

### **Conversion**

Each share of redeemable convertible preferred stock shall be convertible at any time, at the option of the holder, into shares of the Company's common stock at a conversion price equal to the original purchase price (subject to anti-dilution adjustments, discussed below), which is \$2.9712 per share for each share of Series C redeemable convertible preferred stock, \$1.4507 per share for each share of Series B redeemable convertible preferred stock, \$0.84 per share for each share of Series A redeemable convertible preferred stock and \$0.455 per share for each share of Series 1 redeemable convertible preferred stock. The redeemable convertible preferred stock will automatically convert at the then applicable conversion rate upon the closing of a firm commitment underwritten public offering of shares of the Company's common stock, the public offering price per share of which is not less than two times the Series C Original Issue Price (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) resulting in aggregate cash proceeds of at least \$40,000,000. Additionally, the redeemable convertible preferred stock will be automatically converted into common stock, at the then applicable conversion rate, upon the written consent of at a majority of the then outstanding redeemable convertible preferred stock, at least sixty-five percent (65%) of the then outstanding shares of Series C redeemable convertible preferred stock and at least sixty percent (60%) of the then outstanding shares of Series B redeemable convertible preferred stock.

### **Anti-dilution protection**

The redeemable convertible preferred stock have proportional anti-dilution protection for share splits, share dividends and similar recapitalizations. Subject to certain exclusions, anti-dilution price protection for additional sales of securities by the Company for consideration per share (or exercise, conversion or exchange price per share) less than the applicable conversion price per share of any series of redeemable convertible preferred stock, shall be on a broad-based weighted average basis.

### **Protective rights**

The holders of redeemable convertible preferred stock have certain protective rights, including, without limitation, regarding the authorization, alteration, redemption, or sale of any class of stock; the declaration of any dividends; changes to the Company's governing documents or in the size of the Board of Directors or certain transactions that exceed a certain dollar threshold. Such actions must be approved by a majority of the then outstanding redeemable convertible preferred stock (voting as a single class and on an as-converted basis), holders of at least 65% of the then outstanding shares of Series C redeemable convertible preferred stock and holders of at least 60% of the then outstanding shares of Series B redeemable convertible preferred stock, as specified in the Fifth Amended and Restated Certificate of Incorporation.

### **Series B preferred stock purchase agreement**

Pursuant to the terms of the Series B Preferred Stock Purchase Agreement, the purchasers of Series B redeemable convertible preferred stock at the initial closing also committed to purchase an aggregate of 11,373,816 shares of Series B redeemable convertible preferred stock at \$1.4507 per share (the "Second Tranche Shares") at a second closing, subject to certain conditions, upon the achievement of one of the following milestones (i) the Company's enrollment of ten patients in an IV trilaciclib SCLC chemoprotection clinical trial with resulting data trending positively against historical controls or (ii) successful completion of IND-enabling studies for an oral trilaciclib antineoplastic program; provided, that either milestone is achieved prior to the earliest to occur of (i) a qualified initial public offering, (ii) a liquidation event or (iii) 12 months after the initial closing. Holders of at least sixty percent (60%) of the then-outstanding shares of Series B redeemable convertible preferred stock may elect to waive the foregoing conditions and to require the purchasers of Series B redeemable convertible preferred stock to purchase their pro rata portion of the Second Tranche Shares. Each purchaser also had the option, but not the obligation, to purchase all of its allocation of the Second Tranche Shares at any time prior to the earlier to occur of (i) the second closing, and (ii) 12 months after the initial closing.

The option to purchase shares of Series B redeemable convertible preferred stock in the second tranche has been accounted for as a free-standing instrument and classified as a liability. On February 4, 2015, upon purchase of the first tranche of Series B redeemable convertible preferred stock, the option to purchase additional shares was recorded at its fair value, with the remaining cash proceeds received on that date allocated to Series B redeemable convertible preferred stock. As the value of the option to purchase shares in the second tranche increased over time, a change in the fair value of the liability was recorded as "Change in fair value of Series B purchase option liability" in the accompanying statement of operations. This free-standing instrument was exercised on December 10, 2015 when the holders of at least sixty percent (60%) of the then-outstanding shares of Series B redeemable convertible preferred stock elected to waive the conditions set forth above and required the purchasers of Series B redeemable convertible preferred stock to purchase their pro rata portion of the second tranche shares resulting in an outstanding liability of \$0 on December 31, 2015. The Company relied on an independent third party valuation in estimating the fair value of its Series B purchase option liability. The valuations used significant assumptions including the estimated volatility range of 68%-71%, risk free interest rate range of 0.47%-0.94%, estimated fair value of the redeemable convertible preferred stock and a 2-year estimated life of the purchase option. These assumptions were used in the option pricing method and the probability weighted expected return method, a blend of which were considered in establishing fair value.

### **Common stock**

In 2008, the founders of the Company purchased 2,080,000 shares of common stock at par value.

In February 2010, the Company issued 104,000 shares of common stock at par value as part of a license agreement. Par value of the stock issued was considered to be equal to the fair value of the license received in this transaction.

In October 2013, the Company filed the Third Amended and Restated Certification of Incorporation which increased the authorized number of shares of its common stock to 24,800,000.

In February 2015, the Company filed the Fourth Amended and Restated Certification of Incorporation which increased the authorized number of shares of its common stock to 52,000,000.

In November 2015, the Company filed an amendment to the Fourth Amended and Restated Certification of Incorporation which increased the authorized number of shares of its common stock to 53,500,000.

In April 2016, the Company filed the Fifth Amended and Restated Certification of Incorporation which increased the authorized number of shares of its common stock to 73,000,000.

## 8. Stock option plan

In March 2011, the Company adopted the 2011 Equity Incentive Plan (the "Plan"). The Plan provided for the direct award or sale of the Company's common stock and for the grant of up to 1,000,000 stock options to employees, directors, officers, consultants and advisors of the Company. On August 27 2012, the Plan was amended to increase the number of options authorized for grant up to 1,719,780. On October 8, 2013, the Plan was amended again to increase the number of options authorized for grant up to 4,700,217. On February 4, 2015, the Plan was amended to increase the number of options authorized for grant up to 8,051,925. On December 10, 2015, the Plan was amended to increase the number of options authorized for grant up to 10,051,925. On April 27, 2016, the Plan was amended to increase the number of options authorized for grant up to 12,601,925. On November 7, 2016, the Plan was amended to increase the number of options authorized for grant up to 13,201,925. Options granted under the Plan may be either incentive stock options, non-statutory stock options or restricted stock. Incentive stock options ("ISO") may be granted to Company employees. Nonqualified stock options ("NSO") may be granted to Company employees, non-employee directors, officers, consultants and advisors. As of December 31, 2015, the Company had 678,600 shares available for grant and on December 31, 2016, the Company had 530,600 shares available for grant under the Plan.

Stock option activity during 2016 is as follows:

	Options outstanding	Weighted average exercise price	Remaining contractual for life (Years)	Weighted average Aggregate intrinsic value
<b>Balance as of December 31, 2015</b>	7,825,500	\$ 0.40	9.0	\$ 6,599,856
Cancelled	—	—		
Granted	3,298,000	1.45		
Exercised	(53,186)	0.12		
<b>Balance as of December 31, 2016</b>	<u>11,070,314</u>	<u>\$ 0.71</u>	8.4	\$17,462,554
Exercisable at December 31, 2016	4,188,573	0.28	7.8	\$ 8,410,470
Vested at December 31, 2016 and expected to vest	11,070,314	0.71	8.4	\$17,462,554

Employee stock-based compensation expense amounted to \$907,135 for the year ended December 31, 2016. As of December 31, 2016, there were total unrecognized stock-based compensation costs of approximately \$3,773,733 related to outstanding employee stock options. The cost is expected to be recognized over a weighted-average period of 3.14 years.

The Company estimated the fair value of stock options using the Black-Scholes option valuation model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards. The weighted-average grant-date fair value of employee options granted during 2016 was \$0.98 per share.

The fair value of employee stock options was estimated using the following weighted-average assumptions for the year ended December 31, 2016.

**Stock options—employee Black-Scholes inputs**

Expected volatility	74.8 - 78.8%
Weighted-average risk free rate	1.28 - 2.08%
Dividend yield	0%
Expected term (in years)	6.07

The expected term of stock options represents the weighted-average period the stock options are expected to remain outstanding and is based on the option vesting term, contractual terms and industry peers as the Company did not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior.

The expected stock price volatility assumptions for the Company's stock options were determined by examining the historical volatilities for industry peers.

The risk-free interest rate assumption at the date of grant is based on the U.S. Treasury instruments whose term was consistent with the expected term of the Company's stock options.

The expected dividend assumption is based on the Company's history and expectation of dividend payouts.

In connection with the Company's 2015 audit, the Company reassessed the determination of the fair value of the common shares underlying stock options granted throughout 2015. As a result, the Company determined that the fair value of the common shares was \$0.25, \$0.80 and \$0.91 per share at February 27, 2015, July 15, 2015 and September 7, 2015, respectively, which was higher than the fair value as initially determined by the Board of Directors on the dates of grant. The use of this higher share price increased both recognized and unrecognized share-based compensation expense and also impacted the valuation of the non-employee share-based compensation expense which is marked to market at each reporting date.

In connection with our proposed initial public offering and after preliminary discussions with our underwriters, we reassessed the determination of the fair value of the common shares underlying the 3,298,000 stock options granted throughout 2016 and determined that no adjustment was necessary.

During the year ended December 31, 2016, the Company granted 375,000 stock options, to non-employees at a weighted-average exercise price of \$1.39 per share, respectively, in exchange for consulting services. Stock-based compensation expense related to stock options granted to non-employees is recognized as the stock options are earned. The Company believes that the estimated fair value of the stock options is more readily measurable than the fair value of the services rendered.

The fair value of the stock options granted to non-employees is calculated at each reporting date using the Black-Scholes options pricing model using the following weighted-average assumptions for the year ended December 31, 2016:

**Stock options—non-employee Black-Scholes inputs**

Expected volatility	75.3 - 83.9%
Weighted-average risk free rate	1.21 - 1.80%
Dividend yield	0%
Expected term (in years)	9.01

Stock-based compensation expense will fluctuate as the fair value of the common stock fluctuates. In connection with the grant of stock options to non-employees, the Company recorded stock-based compensation expense of \$483,420, for the year ended December 31, 2016. As of December 31, 2016, there was total unrecognized non-employee, stock-based compensation of approximately \$1,301,201.

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The Company has reserved authorized shares of common stock for future issuance at December 31, 2016 as follows:

Conversion of Series C Preferred Stock on a fully-diluted basis	16,828,217
Conversion of Series B Preferred Stock on a fully-diluted basis	22,928,234
Conversion of Series A Preferred Stock on a fully-diluted basis	14,996,692
Conversion of Series 1 Preferred Stock on a fully-diluted basis	2,046,091
Common stock warrants issued with promissory notes	50,000
Other common stock warrants	10,400
Series 1 Preferred Stock warrants issued with promissory notes	65,934
Common stock options outstanding	11,070,314
Options available for grant under Equity Incentive Plan	530,600
	<u>68,526,482</u>

## 9. Net loss per common share and unaudited pro forma net loss per common share

### Net loss per common share

Basic net loss per common share is computed using the weighted average number of common shares outstanding during the period including nominal issuances of common stock warrants. Diluted net loss per common share is computed using the sum of the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including the assumed exercise of stock options, stock warrants and unvested restricted common stock. For the years ended December 31, 2015 and 2016, the following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding because the effect would be anti-dilutive:

	Year ended December 31,	
	2015	2016
Stock options issued and outstanding	5,602,067	9,674,165
Stock warrants	76,334	76,334
	<u>5,678,401</u>	<u>9,750,499</u>

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

The following table summarizes the calculation of the basic and diluted net loss per common shares:

	Year ended December 31,	
	2015	2016
Numerator:		
Loss from operations	\$ (20,263,433)	\$ (30,290,799)
Less: accretion of redeemable convertible preferred stock	(1,426,740)	(4,405,007)
Net loss attributable to common stockholders	<u>\$ (21,690,173)</u>	<u>\$ (34,695,806)</u>
Denominator:		
Weighted-average basic and diluted common shares	4,033,772	4,460,986
Basic and diluted net loss per common share	<u>\$ (5.38)</u>	<u>\$ (7.78)</u>

**Unaudited pro forma net loss per common share**

The unaudited pro forma basic and diluted net loss per common share for the year ended December 31, 2016 gives effect to adjustments arising upon the closing of a qualified initial public offering. The unaudited pro forma net loss attributable to common stockholders used in the calculation of unaudited basic and diluted pro forma net loss per common share does not include the effects of deemed preferred dividends on the common stock because the calculation assumes that the conversion of the redeemable convertible preferred stock into common stock had occurred on the later of January 1, 2016, or the issuance date of the redeemable convertible preferred stock.

The unaudited pro forma basic and diluted weighted-average common shares outstanding used in the calculation of unaudited pro forma basic and diluted net loss per common share for the year ended December 31, 2016 give effect to the automatic conversion upon a qualified initial public offering of all shares of redeemable convertible preferred stock outstanding as of December 31, 2016 into 56,799,234 shares of common stock, as if the proposed initial public offering had occurred on the later of January 1, 2016 or the respective issuance dates of the redeemable convertible preferred stock.

Unaudited pro forma basic and diluted net loss per common share was calculated as follows:

	December 31, 2016
<b>Numerator:</b>	
Net loss and comprehensive loss	\$ (30,290,799)
Less: Increase in fair value of warrant liability	82,231
Pro forma net loss and comprehensive loss	<u>(30,208,568)</u>
<b>Denominator:</b>	
Weighted-average basic and diluted common shares	4,460,986
Pro forma adjustment to reflect assumed automatic conversion of all shares of preferred stock upon the closing of the proposed initial public offering	51,186,611
Pro forma weighted-average common shares outstanding—basic and diluted	<u>55,647,597</u>
Pro forma basic and diluted net loss per common share	<u>\$ (0.54)</u>

**10. Income taxes**

The components of income tax expense (benefit) attributable to continuing operations are as follows:

	Year ended December 31,	
	2015	2016
<b>Current Expense:</b>		
Federal	\$ —	\$ —
State	—	—
	<u>—</u>	<u>—</u>
<b>Deferred Expense:</b>		
Federal	—	—
State	—	—
	<u>—</u>	<u>—</u>
	<u>\$ —</u>	<u>\$ —</u>



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The differences between the company's income tax expense attributable to continuing operation and the expense computed at the 34% U.S. statutory income tax rate were as follows:

	Year ended December 31,	
	2015	2016
Federal income tax expense at statutory rate:	\$ (6,890,000)	\$ (10,299,000)
Increase (reduction) in income tax resulting from:		
State Income Taxes	(335,000)	(397,000)
Increase in Valuation Allowance	6,109,000	10,936,000
Increase in fair value of Series B purchase option liability	1,623,000	—
Equity Financing Expenses	—	371,000
Stock Compensation	48,000	200,000
Research and Development Credit	(509,000)	(803,000)
Other	(46,000)	(8,000)
	\$ —	\$ —

The tax effects of temporary differences and operating loss carryforwards that gave rise to significant portions of the deferred tax assets and deferred tax liabilities were as follows at December 31, 2015 and December 31, 2016:

	2015	2016
<b>Deferred tax assets</b>		
Accrued expenses	\$ 158,000	\$ 751,000
Deferred rent	5,000	16,000
Stock compensation	125,000	386,000
Charitable Contributions		1,000
Capitalized patents and licenses	939,000	1,474,000
R&D credits	635,000	1,451,000
Net operating loss carryforwards	8,116,000	16,844,000
Deferred tax assets	9,978,000	20,923,000
<b>Deferred tax liabilities</b>		
Property, plant and equipment, primarily due to differences in depreciation	(4,000)	(13,000)
Deferred tax liabilities	(4,000)	(13,000)
Valuation allowance	(9,974,000)	(20,910,000)
Net deferred tax assets	\$ —	\$ —

At December 31, 2015 and December 31, 2016, the Company evaluated all significant available positive and negative evidence, including the existence of losses in recent years and management's forecast of future taxable income, and, as a result, determined it was more likely than not that federal and state deferred tax assets, including benefits related to net operating loss carryforwards, would not be realized. The valuation allowance was increased from \$9,974,000 at December 31, 2015 to \$20,910,000 at December 31, 2016. The increase in valuation allowance was due primarily to the increase in net operating loss carryforwards and income tax credits.

At December 31, 2016, the Company has federal net operating loss carryforwards of approximately \$46,817,000, which are available to offset future taxable income. The federal net operating loss carryforwards

begin to expire in 2028. In addition, the Company has state net operating loss carryforwards totaling approximately \$46,814,000, which are available to offset future state taxable income. State net operating losses begin to expire in 2023. Because the Company has incurred cumulative net operating losses since inception, all tax years remain open to examination by U.S. federal and state income tax authorities.

In accordance with FASB ASC 740, *Accounting for Income Taxes*, the Company reflects in the financial statements the benefit of positions taken in a previously filed tax return or expected to be taken in a future tax return only when it is considered 'more-likely-than-not' that the position taken will be sustained by a taxing authority. As of December 31, 2015 and 2016, the Company had no unrecognized income tax benefits and correspondingly there is no impact on the Company's effective income tax rate associated with these items. The Company's policy for recording interest and penalties relating to uncertain income tax positions is to record them as a component of income tax expense in the accompanying statements of income. As of December 31, 2015 and 2016, the Company had no such accruals.

The Company's ability to utilize its net operating loss (NOL) and research and development (R&D) credit carryforwards may be substantially limited due to ownership changes that may have occurred or that could occur in the future, as required by Section 382 of the Internal Revenue Code of 1986, as amended (the Code), as well as similar state provisions. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an "ownership change," as defined by Section 382 of the Code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percent of the outstanding stock of a company by certain stockholders or public groups.

The Company has not completed a study to assess whether one or more ownership changes have occurred since the Company became a loss corporation under the definition of Section 382. If the Company has experienced an ownership change, utilization of the NOL or R&D credit carryforwards would be subject to an annual limitation, which is determined by first multiplying the value of the Company's stock at the time of the ownership change by the applicable long-term, tax-exempt rate, and then could be subject to additional adjustments, as required. Any such limitation may result in the expiration of a portion of the NOL or R&D credit carryforwards before utilization. Until a study is completed and any limitation known, no amounts are being considered as an uncertain tax position or disclosed as an unrecognized tax benefit under ASC-740. Any carryforwards that expire prior to utilization as a result of such limitations will be removed from deferred tax assets with a corresponding reduction of the valuation allowance. Due to the existence of the valuation allowance, it is not expected that any possible limitation will have an impact on the results of operations of the Company.

## **11. Related party transactions**

Two co-founders and shareholders of the Company have consulting agreements with the Company for their continued development work. The founders received consulting fees of approximately \$104,400 and \$108,000 for the years ended December 31, 2015 and December 31, 2016 respectively, under the agreement.

The Company paid approximately \$20,405 and \$13,500 to the Chairman of the Board of Directors for consulting services during the years ended December 31, 2015 and December 31, 2016, respectively.

## **12. Subsequent events**

The Company evaluated the effect subsequent events would have on the financial statements through February 9, 2017, which is the date the financial statements were available to be issued.

*shares*



## **G1 Therapeutics, Inc.**

*Common stock*

## **Prospectus**

**J.P. Morgan**

**Cowen and Company**

**Needham & Company**

**Wedbush PacGrow**

, 2017

Until \_\_\_\_\_, 2017 (the 25<sup>th</sup> day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

## Part II

### Information not required in prospectus

#### Item 13. Other expenses of issuance and distribution.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, paid or payable by the Registrant in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee:

	Amount paid or to be paid
SEC registration fee	\$
FINRA filing fee	
Initial NASDAQ Global Market listing fee	
Blue sky qualification fees and expenses	
Printing and engraving expenses	
Legal fees and expenses	
Accounting fees and expenses	
Transfer agent and registrar fees and expenses	
Miscellaneous expenses	
Total	\$

#### Item 14. Indemnification of directors and officers.

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any 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 (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she 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 or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or other adjudicating court shall deem proper.

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Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

Our Sixth Amended and Restated Certificate of Incorporation, or the Charter, which will become effective upon completion of the offering, provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our Charter provides that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The Charter further provides that any repeal or modification of such article by our stockholders or amendment to the Delaware General Corporation Law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

Our Amended and Restated By-Laws, or the By-Laws, which will become effective upon completion of the offering, provide that we will indemnify each of our directors and officers and, in the discretion of our board of directors, certain employees, to the fullest extent permitted by the Delaware General Corporation Law as the same may be amended (except that in the case of amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the Delaware General Corporation Law permitted us to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. Article \_\_\_\_\_ of the By-Laws further provides for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees.

In addition, the By-Laws provide that the right of each of our directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, Article \_\_\_\_\_ of the By-Laws authorizes us to provide insurance for our directors, officers and employees, against any liability, whether or not we would have the power to indemnify such person against such liability under the Delaware General Corporation Law or the provisions of Article \_\_\_\_\_ of the By-Laws.

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In connection with the sale of common stock being registered hereby, we have entered into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and the Charter and By-Laws.

We also maintain a general liability insurance policy, which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, against certain liabilities.

### **Item 15. Recent sales of unregistered securities.**

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act of 1933, as amended, or the Securities Act:

In October 2013 and May 2014, we issued an aggregate of 14,996,692 shares of our Series A Preferred Stock at a purchase price of \$0.84 per share to eight investors for aggregate consideration of \$12.6 million, which consideration included conversion of outstanding promissory notes in the principal amount of \$1,276,884 and payment for services in the amount of \$70,338.

In May 2014, we issued 120,000 shares of our common stock to a third-party vendor as compensation for legal services valued at \$15,600.

In February and December 2015, we issued an aggregate of 22,928,234 shares of our Series B Preferred Stock at a purchase price of \$1.4507 per share to 11 investors for aggregate consideration of \$33.3 million, which consideration included professional services valued at \$12,000.

In December 2015, we issued 146,000 shares of our common stock in connection with a license agreement for aggregate consideration of \$181,040. From January 1, 2014 through January 31, 2017, we granted to our employees, directors and consultants options to purchase 2,855,000 shares of our common stock with an exercise price of \$0.10 per share, options to purchase 2,837,894 shares of our common stock with an exercise price of \$0.13 per share, options to purchase 1,966,400 shares of our common stock with an exercise price of \$1.24 per share, options to purchase 3,068,000 shares of our common stock with an exercise price of \$1.39 per share and options to purchase 375,000 shares of our common stock with an exercise price of \$2.29 per share, all under our 2011 Equity Incentive Plan, as amended. In this same period, we issued 829,946 shares of common stock upon the exercise of stock options by our employees, directors and consultants at per share exercise prices ranging from \$0.10 to \$0.13 per share.

In April, May and June 2016, we issued an aggregate of 16,828,217 shares of our Series C Preferred Stock at a purchase price of \$2.9712 per share to 21 investors for aggregate consideration of \$50.0 million.

No underwriters were used in the foregoing transactions, and no discounts or commissions were paid. All sales of securities described above were exempt from the registration requirements of the Securities Act in reliance on Section 4(a)(2) of the Securities Act, Rule 701 promulgated under the Securities Act or Regulation D promulgated under the Securities Act, relating to transactions by an issuer not involving a public offering. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

**Item 16. Exhibits and financial statement schedules.**

(a) Exhibits.

See the Exhibit Index attached to this registration statement, which is incorporated by reference herein.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

**Item 17. Undertakings.**

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Research Triangle Park, North Carolina, on the      day of      , 2017.

### G1 THERAPEUTICS, INC.

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Mark A. Velleca, M.D., Ph.D.  
President and Chief Executive Officer

## Signatures and power of attorney

We, the undersigned directors and officers of G1 Therapeutics, Inc. (the "Company"), hereby severally constitute and appoint Mark A. Velleca, M.D., Ph.D. and Gregory J. Mossinghoff, and each of them singly, our true and lawful attorneys, with full power to them, and to each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-1 filed herewith, and any and all pre-effective and post-effective amendments to said registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, in connection with the registration under the Securities Act of 1933, as amended, of equity securities of the Company, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, 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 connection therewith, as fully to all intents and purposes as each of us might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
<hr/> Mark A. Velleca, M.D., Ph.D.	Chief Executive Officer, President and Director <i>(principal executive officer)</i>	, 2017
<hr/> Gregory J. Mossinghoff	Chief Business Officer <i>(principal financial officer)</i>	, 2017
<hr/> Jennifer K. Moses	Vice President of Finance and Administration <i>(principal accounting officer)</i>	, 2017
<hr/> Seth A. Rudnick, M.D.	Chairman of the Board	, 2017
<hr/> Fredric N. Eshelman, Pharm.D.	Director	, 2017



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<b>Signature</b>	<b>Title</b>	<b>Date</b>
Michael Gutch, Ph.D.	Director	, 2017
Peter Kolchinsky, Ph.D.	Director	, 2017
Glenn P. Muir	Director	, 2017
Christy L. Shaffer, Ph.D.	Director	, 2017
Timothy E. Sullivan	Director	, 2017

## Exhibit index

Exhibit number	Description of exhibit
1.1*	Form of Underwriting Agreement.
3.1	Fifth Amended and Restated Certificate of Incorporation, as amended.
3.2*	Form of Amended and Restated Certificate of Incorporation (to be effective upon completion of the offering).
3.3**	By-Laws of the Registrant.
3.4*	Form of Amended and Restated By-Laws (to be effective upon completion of this offering).
4.1*	Specimen Common Stock Certificate.
4.2**	Form of March 2011 Common Stock Warrant.
4.3**	Form of August 2011 Common Stock Warrant.
4.4**	Form of Series 1 Preferred Stock Warrant.
4.5	Third Amended and Restated Stockholders Agreement, dated as of April 27, 2016, by and among the Registrant and the Stockholders listed therein.
4.6	Second Amended and Restated Registration Rights Agreement, dated as of April 27, 2016, by and among the Registrant and the Stockholders listed therein.
5.1*	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
10.1*	Form of Indemnification Agreement.
10.2+	2011 Equity Incentive Plan, as amended, and forms of award agreements thereunder.
10.3+	2017 Employee, Director and Consultant Equity Plan, to become effective on the date immediately prior to the date the registration statement is declared effective, and forms of award agreements.
10.4+	Executive Employment Agreement, by and between the Registrant and Mark A. Velleca, M.D., Ph.D., dated May 19, 2014, as amended on February 1, 2015 and May 10, 2016.
10.5**+	Executive Employment Agreement, by and between the Registrant and Rajesh K. Malik, M.D., dated July 1, 2014.
10.6**+	Executive Employment Agreement, by and between the Registrant and Gregory J. Mossinghoff, dated February 1, 2015.
10.7**+	Consulting Agreement, by and between the Registrant and Gregory J. Mossinghoff, dated June 3, 2014.
10.8+	Director Agreement, by and between the Registrant and Seth A. Rudnick, M.D., dated July 15, 2016.
10.9+	Advisory Board Member Agreement, by and between the Registrant and Seth A. Rudnick, M.D., dated July 15, 2016.
10.10	Office Lease, by and between the Registrant and Highwoods Realty Limited Partnership as assigned to Raleigh RC Green, LLC, dated January 10, 2014, as amended.
10.11#	Exclusive License Agreement, by and between the Registrant and The Board Of Trustees Of The University Of Illinois, dated November 23, 2016.
21.1**	Subsidiaries of Registrant.
23.1*	Consent of PricewaterhouseCoopers LLP.
23.3*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).

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\* To be filed by amendment.

\*\* Previously filed.

+ Indicates a management contract or compensatory plan.

# Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from the registration statement and have been filed separately with the U.S. Securities and Exchange Commission.

**FIFTH AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
G1 THERAPEUTICS, INC.**

(Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware)

G1 Therapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

**DOES HEREBY CERTIFY:**

1. The corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware (the "Secretary") on May 19, 2008 under the name "G-Zero Therapeutics, Inc.", which was subsequently amended and restated by that certain First Amended and Restated Certificate of Incorporation filed with the Secretary on August 27, 2012, that certain Second Amended and Restated Certificate of Incorporation filed with the Secretary on October 4, 2012, as amended by that certain Certificate of Amendment of Second Amended and Restated Certificate of Incorporation filed with the Secretary on April 1, 2013, that certain Third Amended and Restated Certificate of Incorporation filed with the Secretary on October 8, 2013 and that certain Fourth Amended and Restated Certificate of Incorporation filed with the Secretary on February 3, 2015, as amended by that certain Certificate of Amendment of Restated Certificate of Incorporation filed with the Secretary on December 10, 2015 (the "Existing Certificate").

2. This Fifth Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") amends and restates the corporation's Existing Certificate as heretofore amended or supplemented and has been duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law by the Corporation's directors and stockholders.

**RESOLVED**, that the Existing Certificate as heretofore amended or supplemented be amended and restated in its entirety to read as follows:

**ARTICLE I**

The name of the corporation is G1 Therapeutics, Inc. (the "Corporation").

**ARTICLE II**

The address of the Corporation's registered office in the State of Delaware is 3500 South Dupont Highway, in the City of Dover, Kent County, Delaware 19901. The name of its registered agent at such address is Incorporating Services, Ltd.

**ARTICLE III**

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

## ARTICLE IV

**A. Authorization of Stock.** The total number of shares of all classes of stock which the Corporation shall have the authority to issue is (i) 73,000,000 shares of common stock, \$0.0001 par value per share (the "Common Stock") and (ii) 57,108,717 shares of preferred stock, \$0.0001 par value per share, 2,112,025 of which shall be designated as Series 1 Preferred Stock (the "Series 1 Preferred Stock"), 14,996,692 of which shall be designated as Series A Preferred Stock (the "Series A Preferred Stock"), 23,000,000 of which shall be designated as Series B Preferred Stock (the "Series B Preferred Stock") and 17,000,000 of which shall be designated as Series C Preferred Stock (the "Series C Preferred Stock"; the Series 1 Preferred Stock, the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock are being referred to herein collectively as the "Preferred Stock").

**B. Preferred Stock.** The Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated herein, references to "Sections" or "Subsections" in this **Part B** of this **Article IV** shall refer only to sections and subsections of this **Part B** of this **Article IV**.

### **1. Dividends and Distributions.**

(a) Accruing Dividends. From and after the date of the issuance of any shares of Series A Preferred Stock, dividends at the rate per annum of five percent (5%) of the Series A Original Issue Price (as defined below) shall accrue on such shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) (the "Series A Accruing Dividends"). From and after the date of the issuance of any shares of Series B Preferred Stock, dividends at the rate per annum of five percent (5%) of the Series B Original Issue Price (as defined below) shall accrue on such shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock) (the "Series B Accruing Dividends"). From and after the date of the issuance of any shares of Series C Preferred Stock, dividends at the rate per annum of five percent (5%) of the Series C Original Issue Price (as defined below) shall accrue on such shares of Series C Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock) (the "Series C Accruing Dividends", and together with the Series A Accruing Dividends and Series B Accruing Dividends, the "Accruing Dividends"). The Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative but not compounding; provided, however, that except as set forth in Section 1(b), Section 2 and Section 3, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing Dividends. The "Series C Original Issue Price" shall mean \$2.9712 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock. The "Series B Original Issue Price" shall mean \$1.4507 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The "Series A Original Issue Price" shall mean \$0.84 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock.

(b) Dividend Preference. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series C Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series C Preferred Stock in an amount equal to the amount of the aggregate Accruing Dividends then accrued on each such share of Series C Preferred Stock, and not previously paid. Until the payment in full of the Accruing Dividends set forth in the previous sentence, the Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series B Preferred Stock and Series A Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series B Preferred Stock and Series A Preferred Stock in an amount equal to the amount of the aggregate Accruing Dividends then accrued on each such share of Series B Preferred Stock or Series A Preferred Stock, as applicable, and not previously paid.

(c) Additional Dividends. After payment in full of the Accruing Dividends set forth in Sections 1(a) and (b) above, any additional dividends declared shall be distributed among all holders of Preferred Stock and Common Stock in proportion to the number of shares of Common Stock that would be held by each such holder if all shares of Preferred Stock were converted to Common Stock.

(d) Special Distribution. In the event of a Qualified Transaction (as defined below), the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock may elect, by written notice sent to the Corporation at least five days prior to the effective date of any such Qualified Transaction (a "Special Distribution Notice"), to have all or a portion of the Upfront Cash Proceeds (as defined below) received by the Corporation as consideration in such Qualified Transaction, and lawfully available for distribution to the stockholders, distributed to the holders of capital stock of the Corporation as a special distribution. In the event that a Special Distribution Notice is not sent to the Corporation at least five days prior to the effective date of any such Qualified Transaction, then none of the proceeds from such Qualified Transaction shall be distributed to the holders of capital stock of the Corporation pursuant to this Section 1(d). Any amounts elected to be distributed to the holders of capital stock of the Corporation pursuant to this Section 1(d) shall be referred to herein as a "Special Distribution" and shall be distributed to the stockholders within thirty (30) days after such proceeds are received by the Corporation, with any proceeds subject to an escrow arrangement being treated as being received upon the Corporation's actual receipt of the proceeds upon their release from escrow. Each Special Distribution shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2(a), 2(b), 2(c), 2(d) 2(e) below as if the Qualified Transaction was a Liquidation Event (as defined below) and taking

into account any prior payments of Special Distributions to the holders of capital stock of the Corporation pursuant to this Section 1(d). The Corporation shall give each holder of record of Preferred Stock written notice of any impending Qualified Transaction not less than twenty (20) days prior to the closing of such transaction. A “Qualified Transaction” shall mean a transaction that does not qualify as a Liquidation Event and pursuant to which the Corporation sells, or grants to one or more third parties a license or other rights, or an option to acquire, license or obtain other rights to, assets of the Corporation or its affiliates for which the Corporation or any of its affiliates receives Upfront Cash Proceeds of at least \$15,000,000. “Upfront Cash Proceeds” shall mean any cash consideration that is not subject to any contingency (other than standard closing conditions or an escrow arrangement) and shall include the proceeds from the sale of any Corporation capital stock but shall exclude any cash payments that are directed to any specific *bona fide* research and development plan or activities. Any requirement or obligation under this Section 1(d) may be waived by the written consent of the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock.

## 2. Liquidation Preference.

(a) Series C Liquidation Preference Amount. Upon the consummation of any Liquidation Event, the holders of the Series C Preferred Stock then outstanding shall be entitled to receive, out of the assets of the Corporation available for distribution to its stockholders, an amount for each such share of Series C Preferred Stock equal to (A) the Series C Original Issue Price, plus (B) any accrued but unpaid dividends thereon, whether or not declared, together with any other dividends declared but unpaid thereon, minus (C) any amounts received with respect to such share of Series C Preferred Stock pursuant to any Special Distribution, prior and in preference to any distribution to be made to holders of Series B Preferred Stock, Series A Preferred Stock, Series 1 Preferred Stock, Common Stock or any other class of capital stock of the Corporation ranking junior to the Series C Preferred Stock (the “Series C Liquidation Preference Amount”). Notwithstanding the foregoing, in no event shall the Series C Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the Corporation has insufficient assets to permit payment of such amounts in full to the holders of Series C Preferred Stock, the assets of the Corporation will be distributed to such holders *pro rata* in proportion to the amounts to which each such holder would otherwise be entitled.

(b) Series B Liquidation Preference Amount. Upon the consummation of any Liquidation Event and after the payment to the holders of Series C Preferred Stock of the full preferential amounts specified in Section 2(a), the holders of the Series B Preferred Stock then outstanding shall be entitled to receive, out of the assets of the Corporation available for distribution to its stockholders, an amount for each such share of Series B Preferred Stock equal to (A) the Series B Original Issue Price, plus (B) any accrued but unpaid dividends thereon, whether or not declared, together with any other dividends declared but unpaid thereon, minus (C) any amounts received with respect to such share of Series B Preferred Stock pursuant to any Special Distribution, prior and in preference to any distribution to be made to holders of Series A Preferred Stock, Series 1 Preferred Stock, Common Stock or any other class of capital stock of the Corporation ranking junior to the Series B Preferred Stock (the “Series B Liquidation”).

Preference Amount”). Notwithstanding the foregoing, in no event shall the Series B Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the Corporation has insufficient assets to permit payment of such amounts in full to the holders of Series B Preferred Stock, the assets of the Corporation will be distributed to such holders *pro rata* in proportion to the amounts to which each such holder would otherwise be entitled.

(c) Series A Liquidation Preference Amount. Upon the consummation of any Liquidation Event and after the payment to the holders of Series C Preferred Stock of the full preferential amounts specified in Section 2(a), and payment to the holders of Series B Preferred Stock of the full preferential amounts specified in Section 2(b), the holders of the Series A Preferred Stock then outstanding shall be entitled to receive, out of the assets of the Corporation available for distribution to its stockholders, an amount for each such share of Series A Preferred Stock equal to (A) the Series A Original Issue Price, plus (B) any accrued but unpaid dividends thereon, whether or not declared, together with any other dividends declared but unpaid thereon, minus (C) any amounts received with respect to such share of Series A Preferred Stock pursuant to any Special Distribution, prior and in preference to any distribution to be made to holders of Series 1 Preferred Stock, Common Stock or any other class of capital stock of the Corporation ranking junior to the Series A Preferred Stock (the “Series A Liquidation Preference Amount”). Notwithstanding the foregoing, in no event shall the Series A Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the Corporation has insufficient assets to permit payment of such amounts in full to the holders of Series A Preferred Stock, the assets of the Corporation will be distributed to such holders *pro rata* in proportion to the amounts to which each such holder would otherwise be entitled.

(d) Series 1 Liquidation Preference Amount. Upon the consummation of any Liquidation Event and after the payment to the holders of Series C Preferred Stock of the full preferential amounts specified in Section 2(a), payment to the holders of Series B Preferred Stock of the full preferential amounts specified in Section 2(b) and the payment to the holders of Series A Preferred Stock of the full preferential amounts specified in Section 2(c), the holders of the Series 1 Preferred Stock then outstanding shall be entitled to receive, out of the assets of the Corporation available for distribution to its stockholders, an amount for each such share of Series 1 Preferred Stock equal to (A) the Series 1 Original Issue Price, plus (B) any accrued but unpaid dividends thereon, whether or not declared, together with any other dividends declared but unpaid thereon, minus (C) any amounts received with respect to such share of Series 1 Preferred Stock pursuant to a Special Distribution, prior and in preference to any distribution to be made to holders of Common Stock or any other class of capital stock of the Corporation ranking junior to the Series 1 Preferred Stock (the “Series 1 Liquidation Preference Amount”). The “Series 1 Original Issue Price” shall mean \$0.455 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series 1 Preferred Stock. Notwithstanding the foregoing, in no event shall the Series 1 Liquidation Preference Amount be a negative amount as a result of Special Distributions. If the Corporation has insufficient assets to permit payment of such amounts in full to the holders of Series 1 Preferred Stock, the assets of the Corporation will be distributed to such holders *pro rata* in proportion to the amounts to which each such holder would otherwise be entitled.



(e) Distribution of Remaining Assets. Upon the consummation of any Liquidation Event and after the distribution of the Series C Liquidation Preference Amount in full, the Series B Liquidation Preference Amount in full, the Series A Liquidation Preference Amount in full and the Series 1 Liquidation Preference Amount in full, the remaining assets of the Corporation available for distribution to stockholders shall be distributed among the holders of the Preferred Stock and the Common Stock *pro rata* based on the number of shares of Common Stock held by such holders (assuming full conversion of all shares of Preferred Stock).

(f) Liquidation Events. For purposes hereof, a “Liquidation Event” is:

(i) A voluntary or involuntary liquidation, dissolution or winding up of the Corporation;

(ii) Unless the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis) (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock elect otherwise by written notice sent to the Corporation at least five days prior to the effective date of any such event, the acquisition of the Corporation by another entity, person, or group of affiliated persons or entities by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation), other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain, in substantially the same proportion of ownership as prior to the transaction (either by such voting securities remaining outstanding or by such voting securities being converted into securities of the surviving entity), at least a majority of the total voting power represented by the voting securities and a majority of the equity interests of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions, provided that the foregoing shall not include any transaction or series of related transactions principally undertaken for bona fide equity financing purposes in which cash is received by the Corporation or indebtedness of the Corporation is cancelled or converted, or a combination thereof; and

(iii) Unless the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock elect otherwise by written notice sent to the Corporation at least five days prior to the effective date of any such event, the sale, lease, transfer, exclusive license, conveyance or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation, of all or substantially all of the assets or all or substantially all of the intellectual property of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets or intellectual property of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except in each case where such sale, lease, transfer, exclusive license, conveyance or other disposition is to a wholly owned subsidiary of the Corporation.

(g) Noncompliance. In the event the requirements of this Section 2 are not complied with in respect of any Liquidation Event, the Corporation shall forthwith either (i) cause the closing of such Liquidation Event to be postponed until such time as the requirements of this Section 2 have been complied with, or (ii) cancel such transaction, in which event the rights, preferences and privileges of the holders of Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in Section 2(h).

(h) Notice. The Corporation shall give each holder of record of Preferred Stock written notice of any impending Liquidation Event not later than 20 days prior to the stockholders' meeting called to approve such transaction, or 20 days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 2, and the Corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than 20 days after the Corporation has given the first notice provided for herein or sooner than 10 days after the Corporation has given notice of any material changes provided for herein.

(i) Valuation of Assets in Liquidation Event. In any Liquidation Event, if assets received by the Corporation or its stockholders are other than cash, the value of such assets will be their fair market value, determined as follows:

(i) if the assets consist of securities traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the 30-day period ending three business days prior to the closing of the Liquidation Event;

(ii) if the assets consist of securities actively traded over-the-counter, the value shall be deemed to be the average of the mean of the closing bid and asked prices over the 30-day period ending three business days prior to the closing of the Liquidation Event; and

(iii) if there is no active public market for the assets, the fair market value shall be as determined by the Board of Directors in good faith.

(j) Escrowed or Contingent Amounts. Notwithstanding the above, for purposes of determining the amount each holder of Preferred Stock is entitled to receive in a Liquidation Event, if any portion of the consideration is placed into escrow and/or is subject to contingencies, the Corporation shall cause the merger agreement, purchase agreement, or other agreement governing such Liquidation Event to provide, and the stockholders of the Corporation shall take such actions reasonably requested by the Board of Directors to provide, that (i) the portion of such consideration that is not placed into escrow and not subject to any contingencies (the "Initial Consideration") shall be allocated among the holders of capital stock of the

Corporation in accordance with Sections 2(a), 2(b), 2(c), 2(d) and 2(e), as if the Initial Consideration were the only consideration payable in connection with such Liquidation Event, and (ii) any additional consideration which becomes payable upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2(a), 2(b), 2(c), 2(d) and 2(e) above after taking into account the previous payment of the Initial Consideration and any prior payments of additional consideration as part of the same transaction.

### 3. **Redemption.**

(a) Series C Redemption. At any time on or after the sixth anniversary of the date hereof, the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock may require, by delivery of written notice to the Corporation and all holders of Series C Preferred Stock (the "Series C Redemption Notice"), that the Corporation redeem and purchase all of the outstanding shares of Series C Preferred Stock out of funds lawfully available therefor at a price equal to the greater of: (i) the Series C Liquidation Preference Amount in effect on the date such redemption occurs; and (ii) the Fair Market Value (as defined below) of the shares of Series C Preferred Stock to be redeemed (the "Series C Redemption Price"). For purposes of this Section 3(a), the "Fair Market Value" of a single share of Series C Preferred Stock shall be the value of a single share of Series C Preferred Stock as mutually agreed upon by the Corporation and the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock then outstanding, and, in the event that they are unable to reach agreement, by a third-party appraiser agreed to by the Corporation and the holders of at least sixty-five percent (65%) of the shares of Series C Preferred Stock then outstanding.

(b) Series B Redemption. At any time after all outstanding shares of Series C Preferred Stock have been redeemed pursuant to Section 3(a), the holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock may require, by delivery of written notice to the Corporation and all holders of Series B Preferred Stock (the "Series B Redemption Notice"), that the Corporation redeem and purchase all of the outstanding shares of Series B Preferred Stock out of funds lawfully available therefor at a price equal to the greater of: (i) the Series B Liquidation Preference Amount in effect on the date such redemption occurs; and (ii) the Fair Market Value (as defined below) of the shares of Series B Preferred Stock to be redeemed (the "Series B Redemption Price"). For purposes of this Section 3(b), the "Fair Market Value" of a single share of Series B Preferred Stock shall be the value of a single share of Series B Preferred Stock as mutually agreed upon by the Corporation and the holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock then outstanding, and, in the event that they are unable to reach agreement, by a third-party appraiser agreed to by the Corporation and the holders of at least sixty percent (60%) of the shares of Series B Preferred Stock then outstanding.

(c) Series A Redemption. At any time after all outstanding shares of Series C Preferred Stock have been redeemed pursuant to Section 3(a) and all outstanding shares of Series B Preferred Stock have been redeemed pursuant to Section 3(b), the holders of at least sixty-five percent (65%) of the then outstanding shares of Series A Preferred Stock may require, by delivery of written notice to the Corporation and all holders of Series A Preferred Stock (the

“Series A Redemption Notice”), that the Corporation redeem and purchase all of the outstanding shares of Series A Preferred Stock out of funds lawfully available therefor at a price equal to the greater of: (i) the Series A Liquidation Preference Amount in effect on the date such redemption occurs; and (ii) the Fair Market Value (as defined below) of the shares of Series A Preferred Stock to be redeemed (the “Series A Redemption Price”). For purposes of this Section 3(c), the “Fair Market Value” of a single share of Series A Preferred Stock shall be the value of a single share of Series A Preferred Stock as mutually agreed upon by the Corporation and the holders of at least sixty-five percent (65%) of the shares of Series A Preferred Stock then outstanding, and, in the event that they are unable to reach agreement, by a third-party appraiser agreed to by the Corporation and the holders of at least sixty-five percent (65%) of the shares of Series A Preferred Stock then outstanding.

(d) Series 1 Redemption. At any time after all outstanding shares of Series C Preferred Stock have been redeemed pursuant to Section 3(a), all outstanding shares of Series B Preferred Stock have been redeemed pursuant to Section 3(b), and all outstanding shares of Series A Preferred Stock have been redeemed pursuant to Section 3(c), the holders of a majority of the then outstanding shares of Series 1 Preferred Stock may require, by delivery of written notice to the Corporation and all holders of Series 1 Preferred Stock (the “Series 1 Redemption Notice”), that the Corporation redeem and purchase all of the outstanding shares of Series 1 Preferred Stock out of funds lawfully available therefor at a price equal to the greater of: (i) the Series 1 Liquidation Preference Amount in effect on the date such redemption occurs; and (ii) the Fair Market Value (as defined below) of the shares of Series 1 Preferred Stock to be redeemed (the “Series 1 Redemption Price”). For purposes of this Section 3(d), the “Fair Market Value” of a single share of Series 1 Preferred Stock shall be the value of a single share of Series 1 Preferred Stock as mutually agreed upon by the Corporation and the holders of a majority of the shares of Series 1 Preferred Stock then outstanding, and, in the event that they are unable to reach agreement, by a third-party appraiser agreed to by the Corporation and the holders of a majority of the shares of Series 1 Preferred Stock then outstanding. Each of the Series C Redemption Notice, the Series B Redemption Notice, the Series A Redemption Notice and the Series 1 Redemption Notice is referred to herein as a “Redemption Notice”, and each of the Series C Redemption Price, the Series B Redemption Price, the Series A Redemption Price and the Series 1 Redemption Price is referred to herein as a “Redemption Price”.

(e) Installments. The redemption of any series of Preferred Stock shall occur in three equal installments, with the first such installment occurring within 90 days of delivery of the applicable Redemption Notice on a date agreed to by the Corporation and (i) in the case of the Series C Preferred Stock, the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock, (ii) in the case of the Series B Preferred Stock, the holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock, (iii) in the case of the Series A Preferred Stock, the holders of at least sixty-five percent (65%) of the then outstanding shares of Series A Preferred Stock or (iv) in the case of the Series 1 Preferred Stock, the holders of a majority of the then outstanding shares of Series 1 Preferred Stock. On such date and on each of the two successive annual anniversaries of the applicable Redemption Notice dates thereafter (each, a “Redemption Date”), the Corporation shall redeem and purchase from the holders of the applicable series of Preferred Stock, *pro rata* in accordance with their respective shares of such series of Preferred Stock, one-third of the outstanding shares of such series of Preferred Stock (with any remaining outstanding shares

being acquired in the final installment). If the Corporation does not have sufficient funds legally available to redeem on the Redemption Date all shares of the applicable series of Preferred Stock to be redeemed thereon, the Corporation shall redeem a *pro rata* portion of each holder's redeemable shares of such series of Preferred Stock out of funds legally available therefor, based on the respective amounts that would otherwise be payable in respect of the shares to be redeemed if the legally available funds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. For purposes of clarity, with respect to any Preferred Stock that has not yet been redeemed, such stock shall continue to have the rights, benefits and privileges associated with such series of Preferred Stock contemplated herein.

(f) Surrender of Certificates; Payment. Prior to any Redemption Date, a holder of Preferred Stock may elect to convert its shares of Preferred Stock scheduled to be redeemed on such date into Common Stock in accordance with the terms hereof, after which such Common Stock shall not be redeemable under this Section 3. Otherwise, on or before each Redemption Date, each holder of shares of Preferred Stock to be redeemed on such date shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect to such certificate) to the Corporation in exchange for payment in full of the applicable Redemption Price for such shares. If all of the shares of Preferred Stock represented by a certificate are not redeemed, a new certificate representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder.

(g) Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately canceled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

4. Conversion. The Preferred Stock may convert into Common Stock in accordance with the following:

(a) Optional Conversion.

(i) Each holder of a share of Series C Preferred Stock shall have the right (the "Series C Conversion Right") to convert, at its option, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for such stock, each such share into a number of fully paid and non-assessable shares of Common Stock determined by dividing the Series C Original Issue Price by the Series C Conversion Price in effect on the date the certificate is surrendered for conversion (such rate, the "Series C Conversion Rate"), determined as hereafter provided. The "Series C Conversion Price" initially shall equal \$2.9712 and shall be adjusted from time to time in accordance with Section 5. Before any holder of Series C Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor (or, if any such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect thereto), duly endorsed, at the office of the Corporation or any transfer agent for the Series C Preferred Stock, and shall

give written notice to the Corporation (a “Series C Conversion Exercise Notice”) at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. If so required by the Corporation, certificates surrendered for conversion shall be accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by such holder’s attorney duly authorized in writing.

(ii) Each holder of a share of Series B Preferred Stock shall have the right (the “Series B Conversion Right”) to convert, at its option, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for such stock, each such share into a number of fully paid and non-assessable shares of Common Stock determined by dividing the Series B Original Issue Price by the Series B Conversion Price in effect on the date the certificate is surrendered for conversion (such rate, the “Series B Conversion Rate”), determined as hereafter provided. The “Series B Conversion Price” initially shall equal \$1.4507 and shall be adjusted from time to time in accordance with Section 5. Before any holder of Series B Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor (or, if any such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect thereto), duly endorsed, at the office of the Corporation or any transfer agent for the Series B Preferred Stock, and shall give written notice to the Corporation (a “Series B Conversion Exercise Notice”) at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. If so required by the Corporation, certificates surrendered for conversion shall be accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by such holder’s attorney duly authorized in writing.

(iii) Each holder of a share of Series A Preferred Stock shall have the right (the “Series A Conversion Right”) to convert, at its option, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for such stock, each such share into a number of fully paid and non-assessable shares of Common Stock determined by dividing the Series A Original Issue Price by the Series A Conversion Price in effect on the date the certificate is surrendered for conversion (such rate, the “Series A Conversion Rate”), determined as hereafter provided. The “Series A Conversion Price” initially shall equal \$0.84 and shall be adjusted from time to time in accordance with Section 5. Before any holder of Series A Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor (or, if any such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect thereto), duly endorsed, at the office of the Corporation or any transfer agent for the Series A Preferred Stock, and shall give written notice to the Corporation (a “Series A Conversion Exercise Notice”) at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. If so required by the Corporation, certificates surrendered for conversion shall be accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by such holder’s attorney duly authorized in writing.

(iv) Each holder of a share of Series 1 Preferred Stock shall have the right (the “Series 1 Conversion Right” and together with the Series B Conversion Right and the Series A Conversion Right, the “Conversion Rights”) to convert, at its option, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for such stock, each such share into a number of fully paid and non-assessable shares of Common Stock determined by dividing the Series 1 Original Issue Price by the Series 1 Conversion Price in effect on the date the certificate is surrendered for conversion (such rate, the “Series 1 Conversion Rate”), determined as hereafter provided. The “Series 1 Conversion Price” initially shall equal \$0.455 and shall be adjusted from time to time in accordance with Section 5. Before any holder of Series 1 Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor (or, if any such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect thereto), duly endorsed, at the office of the Corporation or any transfer agent for the Series 1 Preferred Stock, and shall give written notice to the Corporation (a “Series 1 Conversion Exercise Notice”) at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. If so required by the Corporation, certificates surrendered for conversion shall be accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by such holder’s attorney duly authorized in writing. Each of the Series C Conversion Rate, the Series B Conversion Rate, the Series A Conversion Rate and the Series 1 Conversion Rate is referred to herein as a “Conversion Rate”, each of the Series C Conversion Price, the Series B Conversion Price, the Series A Conversion Price and the Series 1 Conversion Price is referred to herein as a “Conversion Price”, and each of the Series C Conversion Exercise Notice, the Series B Conversion Exercise Notice, the Series A Conversion Exercise Notice and the Series 1 Conversion Exercise Notice is referred to herein as a “Conversion Exercise Notice”.

(b) Mandatory Conversion. Each share of Preferred Stock shall convert automatically into shares of Common Stock at the then current Conversion Rate at the time (the “Mandatory Conversion Time”) of the earlier of the following to occur:

(i) The closing of the Corporation’s sale of its Common Stock in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, the public offering price per share of which is not less than two times the Series C Original Issue Price (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) and which results in aggregate cash proceeds to the Corporation of not less than \$40,000,000 (a “Qualified Public Offering”); and

(ii) The date specified by a written consent of the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock.

The Corporation shall give the holders of record of shares of Preferred Stock prompt written notice of the occurrence of either of the foregoing events, which notice shall include the Mandatory Conversion Time for the Preferred Stock and the place designated for the mandatory conversion thereof. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock shall surrender such holder's certificate or certificates for all such shares (or, if any such certificate has been lost, stolen or destroyed, a lost certificate affidavit with respect thereto), duly endorsed, at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by such holder's attorney duly authorized in writing.

(c) Issuances and Payment Upon Conversion. The Corporation shall, as soon as practicable following its receipt of a Conversion Exercise Notice or the occurrence of the Mandatory Conversion Time with respect to a holder of Preferred Stock, and its receipt of the certificates (or lost certificate affidavits) representing the shares of Preferred Stock to be converted in connection therewith, (i) issue and deliver to each applicable holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder is entitled and (ii) pay such holder in cash such amount as provided in Section 4(d) in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion.

(d) Fractional Shares. No fractional shares of Common Stock shall be issued upon the conversion of any shares of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock, as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such conversion.

(e) Effect of Conversion. All shares of Preferred Stock surrendered for conversion in accordance with this Section 4 shall no longer be deemed to be outstanding and all rights with respect thereto immediately shall cease and terminate at the time of such conversion, except only for the right of the holders thereof to receive (i) shares of Common Stock in exchange therefor, (ii) payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 4(d), and (iii) if applicable, payment of any declared but unpaid dividends on such shares of Preferred Stock converted. Upon the conversion of Preferred Stock pursuant this Section 4, all unpaid Accruing Dividends on the Preferred Stock so converted, whether or not declared, since the date of issuance to and including the date of conversion, shall be waived and forgiven and thereafter there shall be no further accrual of cumulative dividends on the shares of Preferred Stock so converted. Any shares of Preferred Stock so converted shall be retired and canceled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.



(f) **Reservation of Stock.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Preferred Stock. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient for such purposes, in addition to such other remedies as shall be available to the holder of such Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation.

(g) **Taxes.** The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this **Section 4**. The Corporation shall not, however, be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

(h) **Termination of Conversion Right.** In the event of a notice of redemption of any shares of Preferred Stock, the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the applicable Redemption Price is not fully paid on such Redemption Date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

## **5. Anti-Dilution Protection.**

### **(a) Corporate Transactions.**

(i) **Subdivisions and Combination.** If the Corporation shall at any time and from time to time effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock, then the applicable Conversion Price in effect immediately prior to that subdivision shall be decreased proportionately so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time combine the outstanding shares of Common Stock into a smaller number of shares of Common Stock, the applicable Conversion Price in effect immediately before the

combination shall be increased proportionately so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination of shares of Common Stock becomes effective

(ii) *Certain Dividends and Distributions.* If the Corporation, at any time and from time to time, shall make or issue, or fix a record date for the determination of the holders of its Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

(A) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(B) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

(iii) *Other Dividends and Distributions.* In the event the Corporation at any time or from time to time shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

(iv) *Reorganization, Reclassification, Merger, Consolidation, or Disposition of Assets.* Subject to the Corporation's compliance with Section 2, if the Corporation reorganizes its capital, reclassifies its capital stock, merges or consolidates with or into another entity (where the Corporation is not the surviving entity or where there is any change whatsoever in, or distribution with respect to, the outstanding Common Stock), or sells, transfers or otherwise disposes of all or substantially all of the assets of the Corporation and its subsidiaries, on a consolidated basis, to another entity and, pursuant to the terms of such reorganization, reclassification, merger, consolidation, or disposition of assets, cash, securities or property are to be received by or distributed to the holders of Common Stock who are holders immediately prior to such transaction, then a holder of Preferred Stock shall have the right thereafter to receive, upon the

conversion of such Preferred Stock, the cash, securities or property receivable by a holder of the number of shares of Common Stock into which such Preferred Stock is convertible immediately prior to such event. The Corporation shall not effect any such transaction unless prior to or simultaneously with the consummation thereof, the Corporation or such other entity, as the case may be, shall provide in its organizational documents that the holders of Preferred Stock shall be converted into such cash, securities or property as, in accordance with the foregoing provisions, such holders are entitled to receive. The foregoing provisions of this Section shall similarly apply to successive reorganizations, reclassifications, mergers, consolidations or dispositions of assets.

(b) Dilutive Issuances.

(i) *Issuances at Prices Below the Applicable Conversion Price.* If the Corporation shall issue, at any time on or after the date hereof and until the date of the consummation of a Qualified Public Offering, any Common Stock or securities (including equity and debt securities) convertible into, or exchangeable or exercisable for, shares of Common Stock (a "Common Stock Equivalent") without consideration or for a consideration per share (or exercise, conversion or exchange price per share) less than the applicable Conversion Price in effect for any series of Preferred Stock immediately prior to such issuance, the Conversion Price for such series of Preferred Stock in effect immediately prior to each such issuance shall be reduced to a price determined by multiplying such Conversion Price by a fraction:

(A) The numerator of which is (I) the number of outstanding shares of Common Stock immediately prior to such issuance, assuming the exercise, conversion or exchange of all outstanding Common Stock Equivalents (including the Preferred Stock) into Common Stock (the "Outstanding Common Stock"), plus (II) the number of shares of Common Stock that the aggregate consideration received by the Corporation (subject to Section 5(b)(ii)) for such issuance of any additional Common Stock and Common Stock Equivalents would purchase at such Conversion Price in effect immediately prior to such issuance; and

(B) The denominator of which is (I) the number of shares of Outstanding Common Stock immediately prior to such issuance, plus (II) the number of shares of Common Stock issued in such issuance, plus (III) with respect to any Common Stock Equivalents issued in such issuance, the number of shares of Common Stock into or for which such Common Stock Equivalents may be converted, exchanged or exercised.

(ii) *Adjustments for Common Stock Equivalents.*

(A) For purposes of this Section with respect to any issuance of Common Stock Equivalents, the Corporation shall be deemed to have issued at that time a number of shares of Common Stock equal to the maximum number of shares of Common Stock that are or shall become issuable upon the exercise of the purchase, conversion or exchange rights associated therewith, for

consideration per share equal to (I) the sum of the aggregate consideration per share received by the Corporation in connection with the issuance of such Common Stock Equivalents, as such consideration may be decreased for any amendment or adjustment, plus (II) the minimum amount of consideration per share receivable by the Corporation in connection with the exercise of such Common Stock Equivalents, as such consideration may be decreased for any amendment or adjustment. To the extent any outstanding Common Stock Equivalents are amended or adjusted to increase the maximum number of shares of Common Stock that are or shall become issuable upon the exercise of the purchase, conversion or exchange rights associated therewith, such additional shares of Common Stock shall be deemed to have been issued at the time of such amendment or adjustment.

(B) If, at any time after any such adjustment of the Conversion Price shall have been made pursuant to Section 5(b)(i), there is a change in the consideration received or to be received by the Corporation in connection with the issuance or exercise of such Common Stock Equivalents, or a change in the conversion ratio applicable to such Common Stock Equivalents so that a different number of shares of Common Stock shall be issuable upon the conversion or exchange thereof (other than in connection with automatic anti-dilution adjustments to which such Common Stock Equivalents may be subject), the Conversion Price then in effect shall be readjusted to the Conversion Price that would have been in effect had such changes taken place at the time that such Common Stock Equivalents were initially issued, granted or sold. No readjustment of any Conversion Price pursuant to this paragraph (B) shall (i) increase such Conversion Price by an amount in excess of the adjustment originally made to such Conversion Price in respect of the issue, sale or grant of the applicable Common Stock Equivalents, or (ii) require any adjustment to the amount paid or number of shares of Common Stock received by any holder of the Preferred Stock upon any conversion of any share of Preferred Stock prior to the date upon which the readjustment to such Conversion Price shall occur.

(C) Upon the expiration or termination of any option or any rights of conversion or exchange under such Common Stock Equivalents that shall not have been exercised, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon such expiration, be recomputed as if, in the case of Common Stock Equivalents, the only shares of Common Stock deemed issued were the shares of Common Stock, if any, actually issued upon the exercise of or the conversion or exchange of such Common Stock Equivalents and the consideration received therefor was the consideration actually received by the Corporation for the issue of all such Common Stock Equivalents.

(D) To the extent that an adjustment to any Conversion Price is made pursuant to this Section upon the issuance of Common Stock Equivalents, no further adjustment shall be made pursuant to this Section upon the issuance of Common Stock upon exercise or conversion of such Common Stock Equivalents.

(iii) *Excluded Issuances*. No adjustment to any Conversion Price shall be made pursuant to this Section 5(b) with respect to or upon the issuance of (collectively, the "Exempted Securities");

(A) Common Stock or Common Stock Equivalents issued for which an adjustment has been made pursuant to Sections 5(a)(i), 5(a)(ii), 5(a)(iii) and 5(a)(iv);

(B) shares of Common Stock (or Common Stock Equivalents convertible, exercisable or exchangeable for such shares of Common Stock) under the Corporation's 2011 Equity Incentive Plan, as amended from time to time, or any stock option or equity incentive plan approved by the Board of Directors and pursuant to Section 7(a)(vi) (the "Employee Securities");

(C) Common Stock issued upon the conversion, exercise or exchange of Common Stock Equivalents for which an adjustment already has been made under Section 5(b)(i);

(D) Common Stock issued on the conversion of the Preferred Stock;

(E) up to 65,934 shares of Series 1 Preferred stock issuable upon exercise of warrants outstanding as of the date hereof;

(F) shares or warrants not to exceed two percent (2%) of the total number of outstanding shares of the Corporation's Common Stock at the time of issuance, determined on a fully diluted, as-converted basis, issued to strategic partners of the Corporation or financial institutions pursuant to equipment financing or commercial lending arrangements, in each case as approved by the Board of Directors and at least three of the Preferred Directors (as defined in that certain Third Amended and Restated Stockholders' Agreement dated on or about the original issue date of the first share of Series C Preferred Stock by and among the Corporation and the Stockholders listed thereon (the "Stockholders' Agreement")); and

(G) shares issued by the Corporation in connection with the acquisition of another company by merger, stock purchase, or purchase of all or substantially all of the assets of such other company pursuant to a plan or written agreement approved by the Board of Directors, including the approval of at least three of the Preferred Directors (as defined in the Stockholders' Agreement).

(H) shares of Common Stock (or Common Stock Equivalents) issued as a dividend or distribution on any Preferred Stock.

(iv) *Waiver of Conversion Price Adjustment.* No adjustment to the Series C Conversion Price pursuant to this Section shall be made in connection with any issuance of Common Stock or Common Stock Equivalents if the Corporation receives written notice from the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock agreeing that no such adjustment shall be required. No adjustment to the Series B Conversion Price pursuant to this Section shall be made in connection with any issuance of Common Stock or Common Stock Equivalents if the Corporation receives written notice from the holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be required. No adjustment to the Series A Conversion Price pursuant to this Section shall be made in connection with any issuance of Common Stock or Common Stock Equivalents if the Corporation receives written notice from the holders of at least sixty-five percent (65%) of the then outstanding shares of Series A Preferred Stock agreeing that no such adjustment shall be required. No adjustment to the Series 1 Conversion Price pursuant to this Section shall be made in connection with any issuance of Common Stock or Common Stock Equivalents if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series 1 Preferred Stock agreeing that no such adjustment shall be required.

(c) Determination of Adjustments.

(i) *Process.* Upon any event that shall require an adjustment pursuant to this Section 5, the Corporation shall, at its expense, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, (A) calculate such adjustment in accordance with the terms hereof, (B) prepare a certificate setting forth, in reasonable detail, such adjustment, the method of calculation thereof and the facts upon which such adjustment is based, and (C) deliver a copy of each such certificate to the holders of each series of Preferred Stock so affected. If the holders of a majority of the then outstanding shares of Series 1 Preferred Stock, the holders of at least sixty-five percent (65%) of the then outstanding shares of Series A Preferred Stock, the holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock or the holders of at least sixty percent (60%) of the then outstanding shares of Series C Preferred Stock, as applicable, object to the computation of such adjustment prepared by the Corporation within 30 days after receipt thereof, the Corporation shall promptly appoint an independent investment banking firm of regional or national standing or firm of independent certified public accountants of nationally recognized standing, reasonably acceptable to such holders, who shall calculate such adjustment, at the Corporation's expense, and deliver a copy of such computation to the Corporation and the holders of such series of Preferred Stock. The Corporation shall keep at its principal office copies of all such certificates and cause the same to be available for inspection at such office during normal business hours by the holders of Preferred Stock.

(ii) *Measure of Consideration.* For purposes of this Section 5, the consideration received or receivable by the Corporation in connection with the issuance, sale, grant or exercise of Common Stock or Common Stock Equivalents, irrespective of the accounting treatment of such consideration, shall be valued as follows: (A) in the case of cash, the amount received by the Corporation for such issuance, sale,

grant or exercise; (B) in the case of securities or other property, the fair market value thereof as of the date of such issuance, sale, grant or exercise, as determined in good faith by the Board of Directors; (C) if Common Stock is issued or sold together with other securities or other assets of the Corporation for a consideration that covers both, the consideration received (calculated as provided in clauses (A) and (B) above) shall be allocable to such shares of Common Stock, as determined in good faith by the Board of Directors; (D) if Common Stock Equivalents are issued or sold together with other securities or other assets of the Corporation, together constituting one integral transaction in which no specific consideration is allocated to the Common Stock Equivalents, the consideration allocable to such Common Stock Equivalents shall be determined in good faith by the Board of Directors; and (E) if Common Stock or Common Stock Equivalents are issued or granted in connection with any merger or combination in which the Corporation is the surviving entity, the amount of consideration therefor shall be deemed to be the fair value of such portion of the assets and business of the non-surviving entity attributable to such Common Stock or Common Stock Equivalents, as determined in good faith by the Board of Directors.

(iii) *When Adjustments to be Made.* The adjustments required by this Section 5 shall be made whenever and as often as any specified event requiring such an adjustment shall occur and shall be effective (A) in the case of any dividend or distribution of Common Stock to the holders thereof, immediately after the close of business on the record date for the determination of holders of Common Stock entitled to receive such dividend or distribution, and (B) in the case of any other specified event, at the close of business on the date of such specified event.

## 6. Voting Rights.

(a) General. The holder of each share of Preferred Stock shall have the right to one vote for each share of Common Stock into which such share of Preferred Stock could be converted pursuant to Section 4 on the record date for determining the stockholders entitled to vote on the relevant matter, or if no such record date is set, on the date such vote is taken or any written consent of stockholders is solicited. With respect to such votes, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

(b) Election of Directors. The holders of record of a majority of the then outstanding shares of Series C Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Corporation (the "**Series C Director**"), the holders of record of a majority of the then outstanding shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Corporation (the "**Series B Directors**") and the holders of record of a majority of the then outstanding shares of Series A

Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Corporation (the “**Series A Directors**”). Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of the Series C Preferred Stock, the Series B Preferred Stock or the Series A Preferred Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this subsection, then any directorship not so filled shall remain vacant until such time as the holders of the Series C Preferred Stock, the Series B Preferred Stock or the Series A Preferred Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this subsection, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this subsection. The rights of the holders of the Series A Preferred Stock under the first sentence of this subsection shall terminate on the first date following the date hereof on which there are issued and outstanding less than 2,000,000 shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A Preferred Stock). The rights of the holders of the Series B Preferred Stock under the first sentence of this subsection shall terminate on the first date following the date hereof on which there are issued and outstanding less than 3,000,000 shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series B Preferred Stock). The rights of the holders of the Series C Preferred Stock under the first sentence of this subsection shall terminate on the first date following the date hereof on which there are issued and outstanding less than 3,000,000 shares of Series C Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series C Preferred Stock).

## **7. Protective Provisions.**

(a) Preferred Stock Protective Provisions. For so long as at least 8,000,000 shares of Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock) remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, and shall not permit any of its subsidiaries to, do any of the following without (in addition to any other vote required by law or the Certificate of



Incorporation) the written consent or affirmative vote of the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock and (iii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

(i) create, or authorize the creation of, any new class or series of capital stock having rights, preferences, powers and privileges senior to or on a parity with the Preferred Stock;

(ii) (x) reclassify, alter, amend or modify (by any means) any existing security of the Corporation that is *pari passu* with the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Preferred Stock in respect of any such right, preference, power or privilege, or (y) reclassify, alter, amend or modify (by any means) any existing security of the Corporation that is junior to the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Preferred Stock in respect of any such right, preference, power or privilege;

(iii) alter or change the rights, preferences or privileges of the Preferred Stock;

(iv) increase or decrease the authorized number of shares of the Corporation's capital stock or any class or series of the Corporation's capital stock;

(v) amend, alter, waive or repeal any provision of the Corporation's Certificate of Incorporation or Bylaws;

(vi) adopt or amend any provision of the Corporation's 2011 Equity Incentive Plan or adopt or amend any other stock option or equity incentive plan;

(vii) issue any stock options, other than options or other convertible securities issued pursuant to the Corporation's 2011 Equity Incentive Plan, as amended from time to time, or any other stock plan or equity incentive plan approved by the Board of Directors and pursuant to Section 7(a)(vi) hereof;

(viii) increase or decrease the authorized number of directors constituting the Board of Directors;

(ix) liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Liquidation Event or consent to any of the foregoing;

- (x) make any change to the fundamental business of the Corporation;
- (xi) consummate or commit to the consummation of a Qualified Transaction or otherwise sell, transfer, lease, pledge, license or otherwise transfer or dispose of, in a single transaction or series of related transactions, any material asset(s) of the Corporation, whether tangible or intangible, exceeding a value of \$250,000;
- (xii) convert the Corporation into another form of business entity or into a corporation organized under a jurisdiction other than Delaware;
- (xiii) create, or hold capital stock in, any subsidiary or affiliate of the Corporation;
- (xiv) enter into any related party transactions;
- (xv) create, or authorize the creation of, or issue, or authorize the issuance of, or incur, guarantee or assume any indebtedness for borrowed money (which shall include for purposes hereof capitalized lease obligations and guarantees or other contingent obligations for indebtedness for borrowed money) if the aggregate of such indebtedness would exceed \$500,000;
- (xvi) other than as provided for in the annual budget duly approved by the Board of Directors for any fiscal year, enter into any transaction involving an obligation or commitment that exceeds \$250,000; or
- (xvii) purchase or redeem or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, and (ii) repurchases of Employee Securities from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary at the lower of the original purchase price or the then-current fair market value thereof.

(b) Series C Preferred Stock Protective Provisions. For so long as at least 1,600,000 shares of Series C Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock) remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, and shall not permit any of its subsidiaries to, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

- (i) create, or authorize the creation of, or issue or obligate itself to issue shares of, any new class or series of capital stock having rights, preferences, powers and privileges senior to or on a parity with the Series C Preferred Stock;

(ii) (x) reclassify, alter, amend or modify (by any means) any existing security of the Corporation that is *pari passu* with the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series C Preferred Stock in respect of any such right, preference, power or privilege, or (y) reclassify, alter, amend or modify (by any means) any existing security of the Corporation that is junior to the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series C Preferred Stock in respect of any such right, preference, power or privilege;

(iii) increase or decrease the authorized number of shares of the Series C Preferred Stock;

(iv) amend, alter, waive or repeal any provision of the Corporation's Certificate of Incorporation or Bylaws in a manner that adversely affects the powers, preferences or rights of the Series C Preferred Stock; or

(v) liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Liquidation Event, or consent to any of the foregoing, unless the amount (i) actually received by the holders of the Series C Preferred Stock at the closing of such corporate transaction and (ii) contributed into an escrow fund by such holders of Series C Preferred Stock in connection therewith, equals at least three (3) times the Series C Original Issue Price per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to each share of the Series C Preferred Stock), it being understood that that any milestone, earnout or other similar transaction payments payable in connection with such corporate transaction shall not be considered paid or contributed to such holders of Series C Preferred Stock for purposes of this clause (v).

**8. Notices.** All notices, consents, waivers and other communications required to be given to any holder of Preferred Stock hereunder shall be in writing and shall be either delivered by hand, or mailed by registered or certified mail or by a nationally recognized overnight delivery service, postage prepaid, to a party at its address set forth in the Corporation's books and records. Each such notice or other communication shall be deemed to have been duly given and to be effective (a) if delivered by hand, immediately upon delivery if delivered on a business day during normal business hours and, if otherwise, on the next business day, (b) if mailed, on the fourth business day following deposit in the United States mail addressed as set forth above, or (c) if sent by a nationally recognized overnight delivery service, on the day of delivery by such service or, if not a business day, on the first business day after delivery. Notices and other communications that are not required hereunder may be transmitted by any means, including e-mail.

C. **Common Stock.** The Common Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated herein, references to “Sections” or “Subsections” in this **Part C** of this **Article IV** shall refer only to sections and subsections of this **Part C** of this **Article IV**.

1. **Dividends.** 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 liquidation, dissolution or winding up of the Corporation, the assets of the Corporation shall be distributed as provided in **Section 2** of **Part B** of **Article IV**.

3. **Voting.** The holder of each share of Common Stock shall have the right to one vote for each such share, and shall be entitled to notice of any stockholders’ meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward). The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

#### **ARTICLE V**

Except as otherwise provided in this Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

#### **ARTICLE VI**

Subject to any additional vote required by this Certificate of Incorporation or the Stockholders’ Agreement, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

#### **ARTICLE VII**

Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

## ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept (subject to any provision of the General Corporation Law) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

## ARTICLE IX

**A. Director Liability.** To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or otherwise. If the General Corporation Law or any other law of the State of Delaware is amended after the effective date of this Fifth Amended and Restated Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

**B. Indemnification.** The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnified Person") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director, board observer or officer of the Corporation or, while a director, board observer or officer of the Corporation, is or was serving at the request of the Corporation as a director, board observer, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding. Such right shall include the right to be paid by the Corporation expenses incurred in defending any such proceeding in advance of its final disposition to the maximum extent permitted under the General Corporation Law.

**C. Amendments.** No amendment, repeal or modification of this **Article IX**, or adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this **Article IX**, shall eliminate or reduce the effect of this **Article IX**, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this **Article IX**, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

**D. Corporate Opportunities.** The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "Excluded Opportunity" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the

Corporation or any of its subsidiaries (collectively, "Covered Persons"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

#### ARTICLE X

Subject to Section 7 of **Part B** of **Article IV**, 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 all rights conferred upon stockholders herein are granted subject to this reservation; provided, however, that any provision of this Certificate of Incorporation that requires approval by at least a certain percentage of a class or a series may only be amended, altered, changed or repealed with the approval of at least such percentage of such class or series in addition to any other requirements required by law or this Certificate of Incorporation.

\* \* \*

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Fifth Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Existing Certificate, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

[Remainder of Page Intentionally Left Blank]

**IN WITNESS WHEREOF**, this Fifth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of the Corporation on this 27th day of April, 2016.

**G1 THERAPEUTICS, INC.**

By: /s/ Mark Velleca  
Name: Mark Velleca  
Title: Chief Executive Officer

[Signature page to G1 Therapeutics, Inc. Fifth Amended and Restated Certificate of Incorporation]

### THIRD AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT

This Third Amended and Restated Stockholders' Agreement (this "Agreement") is made and entered into as of April 27, 2016, by and among G1 Therapeutics, Inc., a Delaware corporation (the "Company"), the individuals and entities identified on Schedule A as the Series 1 Preferred Stockholders (the "Series 1 Preferred Stockholders"), the individuals and entities identified on Schedule A as the Series A Preferred Stockholders (the "Series A Preferred Stockholders"), the individuals and entities identified on Schedule A as the Series B Preferred Stockholders (the "Series B Preferred Stockholders"), the individuals and entities identified on Schedule A as the Series C Preferred Stockholders (the "Series C Preferred Stockholders"; the Series 1 Preferred Stockholders, the Series A Preferred Stockholders, the Series B Preferred Stockholders and the Series C Preferred Stockholders collectively, the "Investors" and each, an "Investor"), and the individuals or entities identified on Schedule A hereto as the Key Holders (each a "Key Holder" and collectively, the "Key Holders"). The Investors and the Key Holders are sometimes referred to herein collectively as the "Stockholders," and each individually, a "Stockholder."

#### RECITALS

**WHEREAS**, in connection with the sale of Series B Preferred Stock of the Company, the Company, the Key Holders, the Series 1 Preferred Stockholders, the Series A Preferred Stockholders and the Series B Preferred Stockholders entered into a Second Amended and Restated Stockholders Agreement, dated as of February 4, 2015 (the "Prior Stockholders' Agreement");

**WHEREAS**, concurrently with the execution of this Agreement, the Company and the Series C Preferred Stockholders are entering into a Series C Preferred Stock Purchase Agreement (the "Purchase Agreement") providing for the sale of shares of the Company's Series C Preferred Stock; and

**WHEREAS**, it is a condition to the closing of the sale and issuance of the Series C Preferred Stock that the parties amend and restate the Prior Stockholders' Agreement as set forth herein.

**NOW, THEREFORE**, the parties agree as follows:

1. Definitions.

1.1 "Affiliate" means, with respect to any specified Person, any other Person who directly or indirectly, controls, is controlled by or is under common control with such Person, including without limitation, any current or former limited partner, general partner, managing member, manager, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "Board" has the meaning set forth in **Section 2.1**.



1.3 “Capital Stock” means (a) shares of Common Stock or Preferred Stock (whether now outstanding or hereafter issued in any context), (b) shares of Common Stock issuable upon conversion of Preferred Stock and (c) shares of Common Stock issuable upon exercise or conversion, as applicable, of stock options, warrants or other convertible securities of the Company; in each case, now owned or subsequently acquired by any Stockholder, or its respective successors or permitted transferees or assigns. For purposes of calculating the number of shares of Capital Stock held by a Stockholder (or any other calculation based thereon), all shares of Preferred Stock shall be deemed to have been converted into Common Stock at the then-applicable conversion ratio.

1.4 “CEO Director” has the meaning set forth in **Section 2.2(a)**.

1.5 “Common Stock” means shares of common stock of the Company, \$0.0001 par value per share.

1.6 “Company” has the meaning set forth in the Preamble.

1.7 “Company Notice” means written notice from the Company notifying the Transferring Stockholder that the Company intends to exercise its Right of First Refusal as to some or all of the Transfer Stock with respect to any Proposed Transfer.

1.8 “Company Undersubscription Notice” has the meaning set forth in **Section 3.1(d)**.

1.9 “Cormorant” has the meaning set forth in **Section 2.2(b)**.

1.10 “Cormorant Director” has the meaning set forth in **Section 2.2(b)**.

1.11 “Cormorant Observer” has the meaning set forth in **Section 5.1(f)(iv)**.

1.12 “Derivative Securities” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.13 “Electing Holders” has the meaning set forth in **Section 2.6(a)**.

1.14 “EV” has the meaning set forth in **Section 2.2(c)(i)**.

1.15 “EV Director” has the meaning set forth in **Section 2.2(c)(i)**.

1.16 “Exercising Investors” has the meaning set forth in **Section 3.1(d)**.

1.17 “Founders” means Norman E. Sharpless, M.D. and Kwok-Kin Wong, M.D., Ph.D.

- 1.18 “Fully Exercising Investor” has the meaning set forth in **Section 5.2(c)**.
- 1.19 “GAAP” has the meaning set forth in **Section 5.1(a)(ii)**.
- 1.20 “Hatteras” has the meaning set forth in **Section 2.2(d)(ii)**.
- 1.21 “Hatteras Observer” has the meaning set forth in **Section 5.1(f)(ii)**.
- 1.22 “HVP Director” has the meaning set forth in **Section 2.2(d)(ii)**.
- 1.23 “Immediate Family Member” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, registered domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, life partner, or sister-in-law, including adoptive relationships, of a natural person referred to herein.
- 1.24 “Independent Director” has the meaning set forth in **Section 2.2(e)**.
- 1.25 “Investor(s)” has the meaning set forth in the Preamble
- 1.26 “Investor Notice” means written notice from a Major Investor notifying the Company and the Transferring Stockholder that such Major Investor intends to exercise its Secondary Refusal Right as to a portion of the Transfer Stock with respect to any Proposed Transfer.
- 1.27 “Investor Notice Period” has the meaning set forth in **Section 3.1(d)**.
- 1.28 “IPO” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.
- 1.29 “Key Holder(s)” has the meaning set forth in the Preamble.
- 1.30 “Lumira” has the meaning set forth in **Section 5.1(f)(iii)**.
- 1.31 “Lumira Observer” has the meaning set forth in **Section 5.1(f)(iii)**.
- 1.32 “Major Investor” means any Investor, individually or together with such Investor’s Affiliates that, in the aggregate, holds at least (i) 5% of the then outstanding shares of Preferred Stock or (ii) 600,000 shares of the Company’s Series C Preferred Stock (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).
- 1.33 “MEVE” has the meaning set forth in **Section 2.2(d)(i)**.
- 1.34 “MEVE Director” has the meaning set forth in **Section 2.2(d)(i)**.
- 1.35 “New Securities” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

- 1.36 “Offer Notice” has the meaning set forth in **Section 5.2(b)**.
- 1.37 “Person” means an individual, firm, corporation, partnership, association, limited liability company, trust or any other entity.
- 1.38 “Preferred Directors” has the meaning set forth in **Section 2.2(d)**.
- 1.39 “Preferred Stock” means shares of Series 1 Preferred Stock, Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.
- 1.40 “Prohibited Transfer” has the meaning set forth in **Section 3.3(c)**.
- 1.41 “Proposed Sale” has the meaning set forth in **Section 2.6(b)**.
- 1.42 “Proposed Transfer” means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by any Transferring Stockholder, except for any transfer exempted pursuant to **Section 4** below.
- 1.43 “Proposed Transfer Notice” means written notice from a Transferring Stockholder setting forth the terms and conditions of a Proposed Transfer.
- 1.44 “Prospective Transferee” means any Person to whom a Transferring Stockholder proposes to or otherwise intends to make a Proposed Transfer.
- 1.45 “Public Offering” has the meaning set forth in **Section 4.2**.
- 1.46 “Qualified Public Offering” has the meaning set forth in the Restated Certificate.
- 1.47 “RA Capital” has the meaning set forth in **Section 2.2(c)(ii)**.
- 1.48 “RA Capital Director” has the meaning set forth in **Section 2.2(c)(ii)**.
- 1.49 “Restated Certificate” means the Company’s Fifth Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.
- 1.50 “Right of Co-Sale” means the right, but not the obligation, of a Major Investor to participate in a Proposed Transfer on the terms and conditions specified in the Proposed Transfer Notice.
- 1.51 “Right of First Refusal” means the right, but not the obligation, of the Company, or its permitted transferees or assigns, to purchase some or all of the Transfer Stock with respect to a Proposed Transfer, on the terms and conditions specified in the Proposed Transfer Notice.

- 1.52 “Sale of the Company” means either: (a) a Stock Sale, or (b) a transaction that qualifies as a “Liquidation Event” (as defined in the Restated Certificate).
- 1.53 “Secondary Notice” means written notice from the Company notifying the Major Investors and the Transferring Stockholder that the Company does not intend to exercise its Right of First Refusal as to all shares of Transfer Stock with respect to any Proposed Transfer.
- 1.54 “Secondary Refusal Right” means the right, but not the obligation, of each Major Investor to purchase up to its pro rata portion (based upon the total number of shares of Capital Stock and Derivative Securities (assuming any such Derivative Securities are exercised, converted or exchanged for the maximum number of shares of Common Stock) then held by all Major Investors other than the Transferring Stockholder in the case that the Transferring Stockholder is a Major Investor) of any Transfer Stock not purchased pursuant to the Right of First Refusal, on the terms and conditions specified in the Proposed Transfer Notice.
- 1.55 “Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
- 1.56 “Series 1 Preferred Stock” means shares of Series 1 Preferred Stock of the Company, \$0.0001 par value per share.
- 1.57 “Series 1 Preferred Stockholders” has the meaning set forth in the Preamble.
- 1.58 “Series A Preferred Stock” means shares of Series A Preferred Stock of the Company, \$0.0001 par value per share.
- 1.59 “Series A Preferred Stockholders” has the meaning set forth in the Preamble.
- 1.60 “Series A Directors” has the meaning set forth in **Section 2.2(d)**.
- 1.61 “Series B Directors” has the meaning set forth in **Section 2.2(c)**.
- 1.62 “Series B Preferred Stock” means shares of Series B Preferred Stock of the Company, \$0.0001 par value per share.
- 1.63 “Series B Preferred Stockholders” has the meaning set forth in the Preamble.
- 1.64 “Series C Preferred Stock” means shares of Series C Preferred Stock of the Company, \$0.0001 par value per share.
- 1.65 “Series C Preferred Stockholders” has the meaning set forth in the Preamble.

1.66 “Stock Sale” means a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares of Capital Stock representing more than fifty percent (50%) of the outstanding voting power of the Company.

1.67 “Stockholder(s)” has the meaning set forth in the Preamble.

1.68 “Stockholder Representative” has the meaning set forth in **Section 2.6(a)(vii)**.

1.69 “Transfer Stock” means shares of Common Stock (other than Series C Conversion Shares (as defined below)), Series 1 Preferred Stock, Series A Preferred Stock, Series B Preferred Stock and Derivative Securities owned by a Transferring Stockholder, or issued to a Transferring Stockholder after the date hereof (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like). For the avoidance of doubt, no shares of Series C Preferred Stock, or any shares of Common Stock (or other securities in the event of a recapitalization, reorganization, or the like, of Common Stock) issued upon conversion of any shares of Series C Preferred Stock (collectively, “Series C Conversion Shares”), shall be considered Transfer Stock.

1.70 “Transferring Stockholder” has the meaning set forth in **Section 3.1(a)**.

1.71 “Undersubscription Notice” means written notice from a Major Investor notifying the Company and the Transferring Stockholder that such Major Investor intends to exercise its option to purchase all or any portion of the Transfer Stock not purchased pursuant to the Right of First Refusal or the Secondary Refusal Right.

## 2. Voting Provisions.

2.1 Size of the Board. Each Stockholder agrees to vote, or cause to be voted, all Capital Stock owned by such Stockholder or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that the size of the Board of Directors of the Company (the “Board”) shall be set and remain at eight (8) directors.

2.2 Board Composition. Each Stockholder agrees to vote, or cause to be voted, all Capital Stock owned by such Stockholder or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the stockholders, the following Persons shall be elected to the Board:

(a) The Company’s Chief Executive Officer (the “CEO Director”), provided that if for any reason the CEO Director shall cease to serve as the Chief Executive Officer of the Company, each of the Stockholders shall promptly vote their respective shares of Capital Stock such Stockholder is entitled to vote (i) to remove the former Chief Executive

Officer from the Board if such Person has not resigned as a member of the Board and (ii) to elect such Person's replacement as Chief Executive Officer of the Company as the new CEO Director, which individual shall initially be Mark A. Velleca, M.D., Ph.D.

(b) For so long as Cormorant Asset Management, LLC ("Cormorant") and its Affiliates collectively hold, subject to **Section 7.9(c)**, at least ten percent (10%) of the issued and outstanding shares of Series C Preferred Stock, originally purchased by it (as adjusted for stock splits, stock dividends, recapitalizations and like transactions), Cormorant shall have the right to designate one individual (the "Cormorant Director"), which individual shall be designated following the date of this Agreement.

(c) Two individuals designated by the holders of the Series B Preferred Stock (the "Series B Directors") as follows:

(i) For so long as Eshelman Ventures, LLC ("EV") and its Affiliates collectively hold at least five percent (5%) of the issued and outstanding shares of Series B Preferred Stock, EV shall have the right to designate one individual (the "EV Director"), which individual shall initially be Fredric N. Eshelman, Pharm. D.

(ii) For so long as RA Capital Healthcare Fund, L.P. ("RA Capital") and its Affiliates collectively hold at least five percent (5%) of the outstanding shares of Series B Preferred Stock, RA Capital shall have the right to designate one individual (the "RA Capital Director"), which individual shall initially be Peter Kolchinsky, Ph.D.

(d) Two individuals designated by the holders of the Series A Preferred Stock (the "Series A Directors"; the Series A Directors, the Series B Directors and the Cormorant Director collectively, the "Preferred Directors") as follows:

(i) for so long as MedImmune Ventures, Inc. and its Affiliates ("MEVE") collectively hold at least five percent (5%) of the outstanding shares of Series A Preferred Stock, MEVE shall have the right to designate one individual (the "MEVE Director"), which individual shall initially be Ron Laufer, M.D.;

(ii) for so long as Hatteras Venture Partners IV SBIC, L.P. and its Affiliates ("Hatteras") collectively hold at least five percent (5%) of the outstanding shares of Series A Preferred Stock, Hatteras shall have the right to designate one individual (the "HVP Director"), which individual shall initially be Christy L. Shaffer, Ph.D.

(e) Two individuals, each of whom shall be an independent outsider who is not an employee, officer, stockholder or otherwise an Affiliate of the Company or any Investor, designated by a majority of the Board (including at least one of the Series B Directors and the Cormorant Director) and elected by the holders of a majority of the Common Stock and the Preferred Stock of the Company voting together as a single class on an as converted to Common Stock basis, which individuals shall initially be Seth A. Rudnick, M.D. and Glenn P. Muir. Dr. Rudnick shall serve initially as the Chairman of the Board.

To the extent that any of clauses (a) through (e) above shall not be applicable, any member of the Board who would otherwise have been designated in accordance with the terms thereof shall instead be voted upon by all the stockholders of the Company entitled to vote thereon in accordance with and pursuant to the Restated Certificate.

2.3 Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if still eligible to serve as provided herein.

2.4 Removal of Board Members. Each Stockholder also agrees to vote, or cause to be voted, all Capital Stock over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that:

(a) no director elected pursuant to this **Section 2** may be removed from office other than for cause unless (i) such removal is directed or approved by the affirmative vote of the Person, or of the holders of a majority of the shares of stock entitled under **Section 2.2** above to designate or elect that director; or (ii) the Person(s) originally entitled to designate or approve such director or occupy such Board seat pursuant to **Section 2.2** above is no longer so entitled to designate or approve such director or occupy such Board seat;

(b) any vacancies created by the resignation, removal or death of a director elected pursuant to this **Section 2** shall be filled pursuant to the provisions of this **Section 2**;

(c) upon the request of any party entitled to designate a director as provided in **Sections 2.2(b)** through **2.2(d)** above to remove such director, such director shall be removed; and

(d) upon the request of a majority of the members of the Board then in office to remove the Independent Director, such director shall be removed.

All Stockholders agree to execute any written consents or proxies required to perform the obligations of this Agreement, and the Company agrees at the request of any party entitled to designate directors to call a special meeting of stockholders for the purpose of electing directors.

2.5 No Liability for Election of Recommended Directors. No Stockholder, nor any Affiliate of any Stockholder, shall have any liability as a result of designating a Person for election as a director for any act or omission by such designated Person in his or her capacity as a director of the Company, nor shall any Stockholder have any liability as a result of voting for any such designee in accordance with the provisions of this Agreement.

2.6 Drag-Along Right.

(a) Actions to be Taken. In the event that (i) the holders of at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and the

holders of at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock (collectively, the “Electing Holders”) and (ii) a majority of the Board approve a Sale of the Company in writing, specifying that this **Section 2.6** shall apply to such transaction, then each Stockholder and the Company hereby agree:

(i) if such transaction requires stockholder approval, with respect to all Capital Stock over which such Stockholder owns or otherwise exercises voting power, to vote (in person, by proxy or by action by written consent, as applicable) all such Capital Stock in favor of, and adopt, such Sale of the Company (together with any related amendment to the Restated Certificate required in order to implement such Sale of the Company) and to vote in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(ii) if such transaction is a Stock Sale, to sell the same proportion of shares of Common Stock, Preferred Stock and Derivative Securities beneficially held by such Stockholder as is being sold by the Electing Holders to the Person or Persons to whom the Electing Holders propose to sell their Common Stock, Preferred Stock and Derivative Securities, and, except as permitted in **Section 2.6(b)** below, on the same terms and conditions as the Electing Holders;

(iii) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Electing Holders in order to carry out the terms and provision of this **Section 2.6**, including without limitation executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, indemnity agreement, escrow agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances) and any similar or related documents;

(iv) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Common Stock, Preferred Stock and/or Derivative Securities owned by such Stockholder or Affiliate in a voting trust or subject any Common Stock, Preferred Stock and/or Derivative Securities to any arrangement or agreement with respect to the voting of such Common Stock, Preferred Stock and/or Derivative Securities, unless specifically requested to do so by the acquiror in connection with the Sale of the Company;

(v) to refrain from exercising any dissenters’ rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company;

(vi) if the consideration to be paid in exchange for the Common Stock, Preferred Stock and Derivative Securities pursuant to this **Section 2.6** includes any securities and due receipt thereof by any Stockholder would require under applicable law (A) the registration or qualification of such securities or of any Person as a broker or dealer or agent with respect to such securities or (B) the provision to any



Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to “accredited investors” as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of such Stockholder’s Common Stock, Preferred Stock and/or Derivative Securities, as applicable, that would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities that such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Common Stock, Preferred Stock and/or Derivative Securities; and

(vii) in the event that the Electing Holders, in connection with such Sale of the Company, appoint a stockholder representative (the “Stockholder Representative”) with respect to matters affecting the Stockholders under the applicable definitive transaction agreements following consummation of such Sale of the Company, (A) to consent to (x) the appointment of such Stockholder Representative, (y) the establishment of any applicable escrow, expense or similar fund in connection with any indemnification or similar obligations, and (z) the payment of such Stockholder’s pro rata portion (from the applicable escrow or expense fund or otherwise) of any and all reasonable fees and expenses to such Stockholder Representative in connection with such Stockholder Representative’s services and duties in connection with such Sale of the Company and its related service as the representative of the Stockholders, and (B) not to assert any claim or commence any suit against the Stockholder Representative or any other Stockholder with respect to any action or inaction taken or failed to be taken by the Stockholder Representative in connection with its service as the Stockholder Representative, absent fraud or willful misconduct.

(b) Exceptions. Notwithstanding the foregoing, a Stockholder will not be required to comply with **Section 2.6(a)** above in connection with any proposed Sale of the Company (the “Proposed Sale”) unless:

(i) any representations and warranties to be made by such Stockholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such shares of Capital Stock, including, but not limited to, representations and warranties that (i) the Stockholder holds all right, title and interest in and to the shares of Capital Stock such Stockholder purports to hold, free and clear of all liens and encumbrances, (ii) the obligations of the Stockholder in connection with the transaction have been duly authorized, if applicable, (iii) the documents to be entered into by the Stockholder have been duly executed by the Stockholder and delivered to the acquirer and are enforceable against the Stockholder in accordance with their respective terms; and (iv) neither the execution and delivery of documents to be entered into in connection with the transaction, nor the performance of the Stockholder’s obligations thereunder, will cause a breach or violation of the terms of any agreement, law or judgment, order or decree of any court or governmental agency;

(ii) the Stockholder shall not be liable for the inaccuracy of any representation or warranty made by any other Person in connection

with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders);

(iii) the liability for indemnification, if any, of such Stockholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company or its Stockholders in connection with such Proposed Sale, is several and not joint with any other Person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders), and subject to the provisions of the Restated Certificate related to the allocation of the escrow, is pro rata in proportion to, and does not exceed, the amount of consideration paid to such Stockholder in connection with such Proposed Sale;

(iv) liability shall be limited to such Stockholder's applicable share (determined based on the respective proceeds payable to each Stockholder in connection with such Proposed Sale in accordance with the provisions of the Restated Certificate) of a negotiated aggregate indemnification amount that applies equally to all Stockholders but that in no event exceeds the amount of consideration otherwise payable to such Stockholder in connection with such Proposed Sale, except with respect to claims related to fraud by such Stockholder, the liability for which need not be limited as to such Stockholder;

(v) upon the consummation of the Proposed Sale, (A) each holder of each class or series of Common Stock, Preferred Stock and Derivative Securities will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of Common Stock, Preferred Stock and Derivative Securities, (B) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (C) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (D) unless the holders of (i) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (ii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock elect to receive a lesser amount by written notice given to the Company at least five (5) days prior to the effective date of any such Proposed Sale, the aggregate consideration receivable by all holders of Common Stock, Preferred Stock and Derivative Securities shall be allocated among the holders of Common Stock, Preferred Stock and Derivative Securities on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Liquidation Event (assuming for this purpose that the Proposed Sale is a Liquidation Event) in accordance with the Restated Certificate in effect immediately prior to the Proposed Sale; provided, however, that, notwithstanding the foregoing, if the consideration to be paid in exchange for a Key Holder's Common Stock, Preferred Stock and Derivative Securities or an Investor's

Common Stock, Preferred Stock and Derivative Securities, as applicable, pursuant to this **Section 2.6(b)(ii)** includes any securities and due receipt thereof by any Key Holder or Investor would require under applicable law (x) the registration or qualification of such securities or of any Person as a broker or dealer or agent with respect to such securities or (y) the provision to any Key Holder or Investor of any information other than such information as a prudent issuer would generally furnish in an offering made solely to “accredited investors” as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Key Holder or Investor in lieu thereof, against surrender of the Key Holder’s Common Stock, Preferred Stock and Derivative Securities or the Investor’s Common Stock, Preferred Stock and Derivative Securities, as applicable, that would have otherwise been sold by such Key Holder or Investor, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which such Key Holder or Investor would otherwise receive as of the date of the issuance of such securities in exchange for the Key Holder’s Common Stock, Preferred Stock and Derivative Securities or the Investor’s Common Stock, Preferred Stock and Derivative Securities, as applicable; and

(vi) subject to **Section 2.6(b)(ii)** above requiring the same form of consideration to be available to the holders of any single class or series of Common Stock, Preferred Stock and Derivative Securities, if any holders of any Common Stock, Preferred Stock and Derivative Securities are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such Common Stock, Preferred Stock and Derivative Securities will be given the same option; provided, however, that nothing in this **Section 2.6(b)(iii)** shall entitle any holder to receive any form of consideration that such holder would be ineligible to receive as a result of such holder’s failure to satisfy any condition, requirement or limitation that is generally applicable to the Company’s stockholders.

(c) Restrictions on Sale of the Company. No Stockholder shall be a party to any Stock Sale unless all holders of Preferred Stock are allowed to participate in such transaction and the consideration received pursuant to such transaction is allocated among the parties thereto in the manner specified in the Restated Certificate in effect immediately prior to the Stock Sale (as if such transaction were a Liquidation Event), unless the holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock, elect otherwise by written notice given to the Company at least five (5) days prior to the effective date of any such transaction or series of related transactions.

2.7 Vote to Increase Authorized Common Stock. Each Stockholder agrees to vote or cause to be voted all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding at any given time.

3. Agreement Among the Company, the Investors and the Key Holders.

3.1 Right of First Refusal.

(a) Grant of Right of First Refusal to Company. Subject to the terms of **Section 4** below, each Stockholder owning at least one percent (1%) of the Company's Capital Stock (a "Transferring Stockholder") hereby grants to the Company a Right of First Refusal to purchase all or any portion of Transfer Stock that such Transferring Stockholder may propose to transfer in a Proposed Transfer, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

(b) Notice. Each Transferring Stockholder proposing to make a Proposed Transfer must deliver a Proposed Transfer Notice to the Company and each Major Investor not later than forty-five (45) days prior to the consummation of such Proposed Transfer. Such Proposed Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Transfer and the identity of the Prospective Transferee. To exercise its Right of First Refusal under this **Section 3**, the Company must deliver a Company Notice to the Transferring Stockholder within fifteen (15) days after delivery of the Proposed Transfer Notice. In the event of a conflict between this Agreement and the Company's Bylaws and any other agreement that may have been entered into by a Stockholder with the Company that contains a conflicting right of first refusal, the Company and the Stockholder acknowledge and agree that the terms of this Agreement shall control and the other right of first refusal shall be deemed satisfied by compliance with **Section 3.1(a)** and this **Section 3.1(b)**.

(c) Grant of Secondary Refusal Right to Major Investors. Subject to the terms of **Section 4** below, each Transferring Stockholder hereby grants to the Major Investors a Secondary Refusal Right to purchase all or any portion of the Transfer Stock not purchased by the Company pursuant to the Right of First Refusal, as provided in this **Section 3.1(c)**. If the Company does not intend to exercise its Right of First Refusal with respect to all Transfer Stock subject to a Proposed Transfer, the Company must deliver a Secondary Notice to the Transferring Stockholder and to each Major Investor to that effect no later than fifteen (15) days after the Transferring Stockholder delivers the Proposed Transfer Notice to the Company. To exercise its Secondary Refusal Right, a Major Investor must deliver an Investor Notice to the Transferring Stockholder and the Company within ten (10) days after the Company's deadline for its delivery of the Secondary Notice as provided in the preceding sentence.

(d) Undersubscription of Transfer Stock. If options to purchase have been exercised by the Company and the Major Investors with respect to some but not all of the Transfer Stock by the end of the ten (10) day period specified in the last sentence of **Section 3.1(c)** (the "Investor Notice Period"), then the Company shall, immediately after the expiration of the Investor Notice Period, send written notice (the "Company Undersubscription Notice") to those Major Investors who fully exercised their Secondary Refusal Right within the Investor Notice Period (the "Exercising Investors"). Each Exercising Investor shall, subject to the provisions of this **Section 3.1(d)**, have an additional option to purchase all or any part of the balance of any such remaining unsubscribed shares of Transfer Stock on the terms and conditions set forth in the Proposed Transfer Notice. To exercise such option, an Exercising Investor must deliver an Undersubscription Notice to the Transferring Stockholder and the Company within ten (10) days after expiration of the Investor Notice Period. In the event there

are two or more such Exercising Investors that choose to exercise the last-mentioned option for a total number of remaining shares in excess of the number available, the remaining shares available for purchase under this **Section 3.1(d)** shall be allocated to such Exercising Investors pro rata based on the number of shares of Transfer Stock such Exercising Investors have elected to purchase pursuant to the Secondary Refusal Right (without giving effect to any shares of Transfer Stock that any such Exercising Investor has elected to purchase pursuant to an Undersubscription Notice). If the options to purchase the remaining shares are exercised in full by the Exercising Investors, the Company shall immediately notify all of the Exercising Investors and the Transferring Stockholder of that fact.

(e) **Forfeiture of Rights.** Notwithstanding the foregoing, if the total number of shares of Transfer Stock that the Company and the Major Investors have agreed to purchase in the Company Notice, Investor Notices and Undersubscription Notices is less than the total number of shares of Transfer Stock, then the Company and the Major Investors shall be deemed to have forfeited any right to purchase the remaining unsubscribed Transfer Stock, and the Transferring Stockholder shall be free to sell all, but not less than all, of such remaining unsubscribed Transfer Stock to the Prospective Transferee on terms and conditions substantially similar (and in no event more favorable than) to the terms and conditions set forth in the Proposed Transfer Notice, it being understood and agreed that (i) any such sale or transfer shall be subject to the other terms and restrictions of this Agreement, including without limitation the terms and restrictions set forth in **Sections 3.2** and **6.8**; (ii) any future Proposed Transfer shall remain subject to the terms and conditions of this Agreement, including this **Section 3**; and (iii) such sale shall be consummated within sixty (60) days after receipt of the Proposed Transfer Notice by the Company and, if such sale is not consummated within such sixty (60)-day period, such sale shall again become subject to the Right of First Refusal and Secondary Refusal Right on the terms set forth herein.

(f) **Consideration; Closing.** If the consideration proposed to be paid for the Transfer Stock is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined in good faith by the Board and as set forth in the Company Notice. If the Company or any Major Investor cannot for any reason pay for the Transfer Stock in the same form of non-cash consideration, the Company or such Major Investor may pay the cash value equivalent thereof, as determined in good faith by the Board and as set forth in the Company Notice. The closing of the purchase of Transfer Stock by the Company and the Major Investors shall take place, and all payments from the Company and the Major Investors shall have been delivered to the Transferring Stockholder, by the later of (i) the date specified in the Proposed Transfer Notice as the intended date of the Proposed Transfer and (ii) sixty (60) days after delivery of the Proposed Transfer Notice.

### 3.2 **Right of Co-Sale.**

(a) **Exercise of Right.** If any Transfer Stock subject to a Proposed Transfer is not purchased pursuant to **Section 3.1** above and thereafter is to be sold to a Prospective Transferee, each respective Major Investor may elect to exercise its Right of Co-Sale and participate on a pro rata basis in the Proposed Transfer as set forth in **Section 3.2(b)** below and, subject to **Section 3.2(d)**, otherwise on the same terms and conditions specified in the Proposed Transfer Notice. Each Major Investor who desires to exercise its Right of Co-Sale

must give the Transferring Stockholder written notice to that effect within ten (10) days after the deadline for delivery of the Secondary Notice described above, and upon giving such notice such Major Investor shall be deemed to have effectively exercised the Right of Co-Sale.

(b) Capital Stock Includable. Each Major Investor who timely exercises such Major Investor's Right of Co-Sale by delivering the written notice provided for in **Section 3.2(a)** above may include in the Proposed Transfer all or any part of such Major Investor's Common Stock, Preferred Stock and Derivative Securities equal to the product obtained by multiplying (i) the aggregate number of shares of Transfer Stock subject to the Proposed Transfer (excluding shares purchased by the Company or the Major Investors pursuant to the Right of First Refusal or the Secondary Refusal Right) by (ii) a fraction, the numerator of which is the number of shares of Capital Stock owned by such Major Investor and Derivative Securities owned by such Major Investor (assuming any such Derivative Securities are exercised, converted or exchanged for the maximum number of shares of Common Stock), in each case, immediately before consummation of the Proposed Transfer and the denominator of which is the total number of shares of Capital Stock and Derivative Securities (assuming any such Derivative Securities are exercised, converted or exchanged for the maximum number of shares of Common Stock), owned, in the aggregate, by all Major Investors exercising the Right of Co-Sale immediately prior to the consummation of the Proposed Transfer plus the number of shares of Transfer Stock held by the Transferring Stockholder. Subject to this Section 3.2(b), the aggregate consideration payable to each Major Investor who timely exercises such Major Investor's Right of Co-Sale and the Transferring Stockholder shall be allocated based on the number of shares of Capital Stock sold to the Prospective Transferee by each such Stockholder as provided in this **Section 3.2(b)**, provided that if a Major Investor who timely exercises such Major Investor's Right of Co-Sale wishes to sell Preferred Stock, the price set forth in the Proposed Transfer Notice shall be appropriately adjusted based on the conversion ratio of the Preferred Stock into Common Stock; and further, provided, that if a Major Investor who timely exercises such Major Investor's Right of Co-Sale wishes to sell Derivative Securities, the price in the Proposed Transfer Notice shall be appropriately adjusted assuming any such Derivative Securities are exercised, converted or exchanged for the maximum number of shares of Common Stock. In the event that the Proposed Transfer constitutes a Change of Control, the terms of the Purchase and Sale Agreement shall provide that the aggregate consideration from such transfer shall be allocated to the Major Investors who timely exercise such Major Investors' Right of Co-Sale and the Transferring Stockholder in accordance with **Section 2 of Article IV(B)** of the Restated Certificate as if (A) such transfer were a Liquidation Event (as defined in the Restated Certificate), and (B) the Capital Stock and Derivative Securities sold in accordance with the Purchase and Sale Agreement were the only Capital Stock and Derivative Securities outstanding. In the event that a portion of the aggregate consideration payable to the Participating Investor(s) and selling Key Holder is placed into escrow, the Purchase and Sale Agreement shall provide that (x) the portion of such consideration that is not placed in escrow (the "Initial Consideration") shall be allocated in accordance with **Section 2 of Article IV(B)** of the Restated Certificate as if the Initial Consideration were the only consideration payable in connection with such transfer, and (y) any additional consideration which becomes payable to the Major Investors who timely exercise such Major Investors' Right of Co-Sale and the Transferring Stockholder upon release from escrow shall be allocated in accordance with Section 2 of Article IV(B) of the Restated Certificate after taking into account the previous payment of the Initial Consideration as part of the same transfer.

(c) Delivery of Certificates. Each Major Investor shall effect its participation in the Proposed Transfer by delivering to the Transferring Stockholder, no later than ten (10) days after such Major Investor's exercise of the Right of Co-Sale:

(i) one or more stock certificates, properly endorsed for transfer to the Prospective Transferee, representing the number of shares of Common Stock that such Major Investor will be permitted to include in the Proposed Transfer;

(ii) one or more stock certificates, properly endorsed for transfer to the Prospective Transferee, representing the number of shares of Preferred Stock that is at such time convertible into the number of shares of Common Stock that such Major Investor will be permitted to include in the Proposed Transfer; and/or

(iii) an instrument of transfer and any other necessary documentation to effectuate a transfer of the applicable Derivative Securities, properly endorsed for transfer to the Prospective Transferee;

provided, however, that if the Prospective Transferee objects to the delivery of convertible Preferred Stock and/or convertible, exercisable or exchangeable Derivative Securities in lieu of Common Stock, such Major Investor shall first convert, exercise or exchange, as applicable, the Preferred Stock and/or the Derivative Securities into Common Stock and deliver Common Stock as provided above. The Company agrees to make any such conversion concurrent with and contingent upon the actual transfer of such shares to the Prospective Transferee.

(d) Purchase Agreement. The parties hereby agree that the terms and conditions of any sale pursuant to this **Section 3.2** will be memorialized in, and governed by, a written purchase and sale agreement (the "Purchase and Sale Agreement") with customary terms and provisions for such a transaction and the parties to such sale further covenant and agree to enter into such an agreement as a condition precedent to any sale or other transfer pursuant to this **Section 3.2**.

(e) Deliveries. Each stock certificate, instrument and/or other documentation a Major Investor delivers to the Transferring Stockholder pursuant to **Section 3.2(c)** above will be transferred to the Prospective Transferee against payment therefor in consummation of the sale of the Transfer Stock pursuant to the terms and conditions specified in the Proposed Transfer Notice and the purchase and sale agreement; and the Transferring Stockholder shall concurrently therewith remit or direct payment to each Major Investor the portion of the sale proceeds to which such Major Investor is entitled by reason of its participation in such sale. If any Prospective Transferee or Transferees refuse(s) to purchase securities subject to the Right of Co-Sale from any Major Investor exercising its Right of Co-Sale hereunder or upon the failure to negotiate a Purchase and Sale Agreement reasonably satisfactory to the participating Major Investors, no Transferring Stockholder may sell any Transfer Stock to such Prospective Transferee or Transferees unless and until, simultaneously with such sale, such Transferring Stockholder purchases all securities subject to the Right of Co-Sale, to the extent exercised, from such Major Investor on the same terms and conditions (including the proposed purchase price) as set forth in the Proposed Transfer Notice and as provided in Section 3.2(b); provided, however, if such sale constitutes a Stock Sale, the portion of the aggregate consideration paid by the Transferring Stockholder to the participating Major Investors shall be made in accordance with Section 3.2(b).

(f) Additional Compliance. If any Proposed Transfer is not consummated within sixty (60) days after receipt of the Proposed Transfer Notice by the Company, the Transferring Stockholder proposing the Proposed Transfer may not sell any Transfer Stock unless they first comply in full with each provision of this **Section 3**. The exercise or election not to exercise any right by any Major Investor hereunder shall not adversely affect its right to participate in any other sales of Transfer Stock subject to this **Section 3.2**.

### 3.3 Effect of Failure to Comply.

(a) Transfer Void; Equitable Relief. Any Proposed Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of the Company or its transfer agent and shall not be recognized by the Company. Each party hereto acknowledges and agrees that any breach of this Agreement may result in substantial harm to the other parties hereto for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders, injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of Transfer Stock not made in strict compliance with this Agreement).

(b) Violation of Refusal Right. If any Transferring Stockholder becomes obligated to sell any Transfer Stock to the Company or any Major Investor under this Agreement and fails to deliver such Transfer Stock in accordance with the terms of this Agreement, the Company and/or such Major Investor may, at its option, in addition to all other remedies it may have, send to such Transferring Stockholder the purchase price for such Transfer Stock as is herein specified and transfer to the name of the Company or such Major Investor (or request that the Company effect such transfer in the name of an Major Investor) on the Company's books the certificate(s) and/or other document(s) representing the Transfer Stock to be sold.

(c) Violation of Co-Sale Right. If any Transferring Stockholder purports to sell any Transfer Stock in contravention of the Right of Co-Sale (a "Prohibited Transfer"), each Major Investor who desires to exercise its Right of Co-Sale under **Section 3.2** may, in addition to such remedies as may be available by law, in equity or hereunder, require such Transferring Stockholder to purchase from such Major Investor the type and number of shares of Common Stock, Preferred Stock and/or Derivative Securities that such Major Investor would have been entitled to sell to the Prospective Transferee under **Section 3.2** had the Prohibited Transfer been effected pursuant to and in compliance with the terms of **Section 3.2**. The sale will be made on the same terms and subject to, including, without limitation, as provided in **Section 3.2(b)**, the same conditions as would have applied had the Transferring Stockholder not made the Prohibited Transfer, except that the sale (including, without limitation, the delivery of the purchase price) must be made within ninety (90) days after the Major Investor learns of the Prohibited Transfer, as opposed to the timeframe proscribed in **Section 3.2**.



4. Exempt Transfers.

4.1 Exempted Transfers. Notwithstanding the foregoing or anything to the contrary set forth herein, the provisions of **Sections 3.1** and **3.2** shall not apply: (a) in the case of a Transferring Stockholder that is an entity, to a transfer of Transfer Stock by such Transferring Stockholder to its Affiliates, stockholders, members, partners or other equity holders or a venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Investor, (b) to a repurchase of Transfer Stock from a Key Holder at a price no greater than originally paid by such Key Holder for such Transfer Stock and pursuant to an agreement containing vesting and/or repurchase provisions approved by a majority of the Board, (c) to a pledge of Transfer Stock that creates a mere security interest in the pledged Transfer Stock, provided that the pledgee thereof agrees in writing in advance to be bound by and comply with all applicable provisions of this Agreement to the same extent as if it were the Transferring Stockholder making such pledge, and/or (d) in the case of a Transferring Stockholder that is a natural person, upon a transfer of Transfer Stock by such Transferring Stockholder made for estate planning purposes, either during his or her lifetime or on death by will or intestacy to his or her spouse, life partner, child (natural or adopted), or any other lineal descendant of such Transferring Stockholder (or his or her spouse or life partner) (all of the foregoing collectively referred to as “family members”), or any other Person approved by the Board, or any custodian or trustee of any trust, partnership or limited liability company for the benefit of, or the ownership interests of which are owned wholly by, such Transferring Stockholder or any such family members; provided that in the case of clause(s) (a), (c), or (d), the Transferring Stockholder shall deliver prior written notice to the Company and the Investors of such pledge, gift or transfer and such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement to the Company and the Investors as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Stockholder (but only with respect to the securities so transferred to the transferee), including the obligations of a Stockholder with respect to Proposed Transfers of such Transfer Stock pursuant to **Section 3**.

4.2 Exempted Offerings. Notwithstanding the foregoing or anything to the contrary herein, the provisions of **Section 3** shall not apply to the sale of any Transfer Stock (a) to the public in an offering pursuant to an effective registration statement under the Securities Act (a “Public Offering”) or (b) pursuant to a Liquidation Event (as defined in the Restated Certificate).

5. Additional Covenants.

5.1 Company Covenants. The Company hereby covenants and agrees to the following.

(a) Information Rights. The Company shall deliver to each Major Investor:

(i) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company, (i) a

balance

sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants;

(ii) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet as of the end of such fiscal quarter, all prepared in accordance with U.S. generally accepted accounting principles ("GAAP") (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(iii) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(iv) as soon as practicable, but in any event thirty (30) days after the final meeting of the Board of Directors in any fiscal year, a budget and business plan for the next fiscal year (the "Budget"), approved by the Board of Directors; and

(v) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this subsection (a) to provide information, upon advice from counsel, (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); (ii) which it would be unlawful for the Company to provide; or (iii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

(b) Board Matters. The Company shall maintain at all times a compensation committee and an audit committee, each of which shall be comprised of at least three (3) directors, one (1) of which shall be the Cormorant Director, one (1) of which shall be a

Series B Director, and shall, at the request of EV, be the EV Director and one (1) of which shall be a Series A Director. Unless otherwise determined by the vote of a majority of the directors then in office, the Board shall meet at least bi-monthly. The Company shall reimburse the directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board and other meetings or events on behalf of the Company.

(c) Option Vesting. All stock options granted under the Company's 2011 Equity Incentive Plan, as amended, or otherwise following the date of this Agreement shall vest 25% on the first anniversary of the grant date with the remaining 75% vesting in equal monthly installments over the subsequent thirty-six (36) months, unless otherwise approved by the Board, including the approval of at least three of the Preferred Directors.

(d) Inspection Rights. The Company shall permit each Major Investor, at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by such Major Investor; provided, however, that the Company shall not be obligated pursuant to this **Section 5.1(d)** to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form reasonably acceptable to the Company) or the disclosure of which would, upon the advice of the Company's legal counsel, adversely affect the attorney-client privilege between the Company and its counsel.

(e) Investor Director Equity Compensation. From the date hereof, the Company shall not issue any equity interest to a Preferred Director in recognition of such Preferred Director's service on the Board or as an officer of the Company or to any Person entitled to designate such Preferred Director to the Board pursuant to **Section 2.2** hereof (or any Affiliate thereof) in recognition of such Preferred Director's service on the Board or as an officer of the Company.

(f) Observer Rights.

(i) The Company shall invite Norman Sharpless, M.D., or an individual designated by Dr. Sharpless, to attend all meetings of the Board in a nonvoting observer capacity and, in this respect, shall give Dr. Sharpless or his representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that Dr. Sharpless or, if applicable, his representative, shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude Dr. Sharpless or his representative from any meeting or portion thereof if access to such information or attendance to such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if Dr. Sharpless or his representative is a competitor of the Company.

(ii) The Company shall invite one individual designated by Hatteras (the “Hatteras Observer”), which individual shall initially be Clay Thorp, to attend all meetings of the Board in a nonvoting observer capacity and, in this respect, shall give the Hatteras Observer copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that Hatteras and the Hatteras Observer shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude the Hatteras Observer from any meeting or portion thereof if access to such information or attendance to such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if Hatteras or the Hatteras Observer is a competitor of the Company.

(iii) The Company shall invite one individual designated by Lumira Capital II, L.P. and its Affiliates (“Lumira”), which individual shall initially be Benjamin Rovinski, to attend all meetings of the Board in a nonvoting observer capacity (the “Lumira Observer”) and, in this respect, shall give the Lumira Observer copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that Lumira and the Lumira Observer shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude the Lumira Observer from any meeting or portion thereof if access to such information or attendance to such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if Lumira or the Lumira Observer is a competitor of the Company.

(iv) The Company shall invite one individual designated by Cormorant and its Affiliates (the “Cormorant Observer”), which individual shall initially be Bihua Chen, to attend all meetings of the Board in a nonvoting observer capacity and, in this respect, shall give the Cormorant Observer copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that Cormorant and the Cormorant Observer shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude the Cormorant Observer from any meeting or portion thereof if access to such information or attendance to such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if Cormorant or the Cormorant Observer is a competitor of the Company.

(g) Lock-Up Agreement. The Company shall cause (i) all entities and individuals that become stockholders of the Company after the date hereof,

(ii) all employees, executives, consultants, advisors and other service providers to the Company who receive stock options of the Company, and (iii) all persons and entities who receive warrants, stock options or other rights to receive the Company’s equity securities, to be bound by market stand-off restrictions substantially similar to the lock-up agreement contained in **Section 5.5** hereof.

(h) Insurance. The Company shall use its commercially reasonable efforts to maintain, from financially sound and reputable insurers, Directors and Officers liability insurance in an amount not less than \$10,000,000 and on terms and conditions satisfactory to the holders of (i) a majority of the then outstanding shares of Preferred Stock (voting as a single class and on an as-converted basis) (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock. The Company shall use its commercially reasonable efforts to obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers term “key-person” insurance on Mark A. Velleca, M.D., Ph.D., in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors.

(i) Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company’s Bylaws, its Restated Certificate, or elsewhere, as the case may be.

(j) FCPA. The Company represents that it shall not knowingly (and shall not knowingly permit any of its subsidiaries or affiliates or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any Non-U.S. Official (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”)), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and affiliates to) promptly cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law as promptly as practicable following becoming aware of any such activities. Upon request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws. The Company shall promptly notify each Investor if the Company becomes aware of any enforcement action. The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA. The Company shall use its best efforts to cause any direct or indirect subsidiary, whether now in existence or formed in the future, to comply in all material respects with all applicable laws.

(k) **Termination of Covenants.** The covenants set forth in this **Section 5.1** (other than **Section 5.1(i)**) shall terminate and be of no further force or effect (i) immediately before the consummation of an IPO, or (ii) upon a Liquidation Event, as such term is defined in the Restated Certificate, whichever event occurs first.

## 5.2 **Rights to Future Stock Issuances.**

(a) **Right of First Offer.** Subject to the terms and conditions of this **Section 5.2** and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor.

(b) The Company shall give notice (the “**Offer Notice**”) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(c) By notification to the Company within fifteen (15) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities that equals the proportion that the Common Stock then held by such Major Investor (directly or indirectly, assuming full conversion and/or exercise as applicable, of all Preferred Stock and other Derivative Securities) bears to the total Common Stock of the Company then outstanding (directly, or indirectly, assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such fifteen (15) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the New Securities available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the amount of New Securities specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors that is equal to the proportion that the Capital Stock then held by such Fully Exercising Investor bears to the Capital Stock then held by all Fully Exercising Investors who wish to purchase such unsubscribed New Securities (on an as converted, exercised basis). The closing of any sale pursuant to this **Section 5.2(c)** shall occur within the later of one hundred and twenty (120) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to **Section 5.2(d)**. The purchase of New Securities pursuant to the rights of any Major Investor under this **Section 5.2** may be completed by an Affiliate of such Major Investor.

(d) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in **Section 5.2(c)**, the Company may, during the ninety (90) day period following the expiration of the periods provided in **Section 5.2(c)**, offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within ninety (90) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered, issued or sold unless first reoffered to the Major Investors in accordance with this **Section 5.2**.

(e) The right of first offer in this **Section 5.2**, as amended from time to time, shall not be applicable to Exempted Securities (as defined in the Company's Restated Certificate).

(f) **Termination.** The covenants set forth in this **Section 5.2** shall terminate and be of no further force or effect (i) immediately before the consummation of an IPO, or (ii) upon a Liquidation Event (as defined in the Restated Certificate), whichever event occurs first.

(g) **Waiver.** The holders of (i) a majority of the then outstanding Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock may choose to waive the rights of all Major Investors arising out of and relating to this **Section 5.2**, which waiver shall be on behalf of and binding upon all Major Investors. The rights of Cormorant arising out of and relating to this **Section 5.2** may not be amended or waived, directly or indirectly, in a manner adverse to Cormorant without the written consent of Cormorant. The rights of AJU Growth & Healthcare Fund ("**AJU**") arising out of and relating to this **Section 5.2** may not be amended or waived, directly or indirectly, in a manner adverse to AJU without the written consent of AJU; provided, however, that the aforementioned consent right of AJU shall terminate if AJU does not purchase on or before June 1, 2016, not less than 670,000 shares of Series C Preferred Stock pursuant to the Purchase Agreement.

5.3 **Legend.** Each certificate representing shares of Capital Stock held by the Stockholders or issued to any permitted transferee in connection with a transfer permitted by **Section 4.1** shall be endorsed with the following legend:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO DISTRIBUTION OR RESALE, AND MAY NOT BE SOLD, MORTGAGED, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT FOR SUCH SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND ANY APPLICABLE STATE SECURITIES LAWS, OR THE AVAILABILITY OF AN EXEMPTION FROM THE REGISTRATION PROVISIONS OF THE SECURITIES ACT OF 1933, AS AMENDED, AND APPLICABLE STATE SECURITIES LAWS. COPIES OF THE SERIES C PREFERRED STOCK PURCHASE AGREEMENT, THE THIRD AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT, AS AMENDED AND/OR RESTATED FROM TIME TO TIME, AND THE SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT, AS AMENDED AND/OR RESTATED FROM TIME TO TIME, PROVIDING FOR

RESTRICTIONS ON TRANSFER OF THESE SECURITIES MAY BE OBTAINED UPON WRITTEN REQUEST BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF THE COMPANY AT THE PRINCIPAL EXECUTIVE OFFICES OF THE COMPANY.

THE COMPANY IS AUTHORIZED TO ISSUE MORE THAN ONE CLASS OR SERIES OF STOCK. THE CORPORATION WILL FURNISH WITHOUT CHARGE TO EACH STOCKHOLDER WHO SO REQUESTS THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL, OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OR SERIES THEREOF AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND/OR RIGHTS.

Each Stockholder agrees that the Company may instruct its transfer agent to impose transfer restrictions on the shares represented by certificates bearing the legend referred to in this **Section 5.3** above to enforce the provisions of this Agreement, and the Company agrees to promptly do so. The legend shall be removed upon termination of this Agreement at the request of the holder.

5.4 Irrevocable Proxy. Each party to this Agreement hereby constitutes and appoints the Chief Executive Officer of the Company, with full power of substitution, as the voting proxy of the party with respect to the election of Persons as members of the Board in accordance with **Section 2** hereto, votes to increase authorized shares pursuant to **Section 2.7** hereof and votes regarding any Sale of the Company pursuant to **Section 2.6** hereof, and hereby authorizes such person to represent and to vote, if and only if such party (i) fails to vote or (ii) attempts to vote (whether by proxy, in person or by written consent), in a manner that is inconsistent with the terms of this Agreement, all of such party's Capital Stock over which such Stockholder owns or has voting control in favor of the election of Persons as members of the Board determined pursuant to and in accordance with the terms and provisions of this Agreement or the increase of authorized shares or approval of any Sale of the Company pursuant to and in accordance with the terms and provisions of **Sections 2.7** and **2.6**, respectively, of this Agreement or to take any action necessary to effect **Sections 2.7** and **2.6**, respectively, of this Agreement. The proxy granted pursuant to the immediately preceding sentence is given in consideration of the agreements and covenants of the Company and the parties in connection with the transactions contemplated by this Agreement and, as such, is coupled with an interest and shall be irrevocable unless and until this Agreement terminates or expires pursuant to **Section 6.2** hereof. Each party hereto hereby revokes any and all previous proxies with respect to the Capital Stock and shall not hereafter, unless and until this Agreement terminates or expires pursuant to **Section 6.2** hereof, purport to grant any other proxy or power of attorney with respect to any Capital Stock, deposit any Capital Stock into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any Person, directly or indirectly, to vote, grant any proxy or give instructions with respect to the voting of any Capital Stock, in each case, with respect to any of the matters set forth herein.

5.5 "Market Stand-off" Agreement. Each Stockholder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company for the IPO, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, which period may be extended upon the



request of the managing underwriter, to the extent required by any FINRA and/or NASD rules, for an additional period of up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 180-day lockup period): (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering, or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this **Section 5.5** shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Stockholder only if all officers and directors and all stockholders individually owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Derivative Securities) are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this **Section 5.5** and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Stockholder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this **Section 5.5** or that are necessary to give further effect thereto.

6. "Bad Actor" Matters.

6.1 Representation. Each Person with the right to designate or participate in the designation of a director pursuant to this Agreement hereby represents that none of the "bad actor" disqualifying events described in Rule 506(d)(1)(i)-(viii) promulgated under the Securities Act (a "**Disqualification Event**") is applicable to such Person or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. For purposes of this Agreement, "Rule 506(d) Related Party" shall mean with respect to any Person any other Person that is a beneficial owner of such first Person's securities for purposes of Rule 506(d) of the Securities Act.

6.2 Covenant. Each Person with the right to designate or participate in the designation of a director pursuant to this Agreement hereby agrees that it shall notify the Company promptly in writing in the event a Disqualification Event becomes applicable to such Person or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable.

7. Miscellaneous.

7.1 Covenant of the Company. The Company agrees to use reasonable efforts, within the requirements of applicable law, to ensure that the rights granted under this Agreement are effective and that the parties enjoy the benefits of this Agreement. Such actions shall include, but not be limited to, the use of the Company's reasonable efforts to cause the nomination and election of the directors as provided in this Agreement.

7.2 **Number of Shares of Stock.** Whenever any provision of this Agreement calls for any calculation based on a number of shares of Capital Stock issued and outstanding or held by a Stockholder, the number of shares deemed to be issued and outstanding or held by that Stockholder, as applicable, shall be the total number of shares of Common Stock then issued and outstanding or owned by that Stockholder, as applicable, plus, without duplication, the total number of shares of Common Stock issuable upon the conversion of any Preferred Stock then issued and outstanding or owned by such Stockholder, as applicable.

7.3 **Term.** Subject to **Section 5.1(j)**, this Agreement shall automatically terminate upon the earlier of (a) immediately prior to the consummation of a Qualified Public Offering and (b) the consummation of a Liquidation Event (as defined in the Company's Restated Certificate) and distribution of proceeds to or escrow for the benefit of the Stockholders in accordance with the Restated Certificate, provided that the provisions of **Section 2.6** hereof will continue after the closing of any Sale of the Company to the extent necessary to enforce the provisions of **Section 2.6** with respect to such Sale of the Company.

7.4 **Stock Split.** All references to numbers of shares in this Agreement shall be appropriately adjusted to reflect any stock dividend, split, combination or other recapitalization affecting the Capital Stock occurring after the date of this Agreement.

7.5 **Notices.** All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, without notice of delivery or transmittal error or failure, (c) four (4) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on **Schedule A** hereof, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this **Section 7.5**. If notice is given to the Company, it shall be sent to G1 Therapeutics, Inc., 79 T.W. Alexander Drive, 4401 Research Commons, Suite 105, Research Triangle Park, North Carolina 27709, Attention: Chief Executive Officer; and a copy (which shall not constitute notice) shall also be sent to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111 Attn: Jonathan L. Kravetz. If notice is given to the Investors, a copy (which shall not constitute notice) shall also be sent to Cooley LLP, 500 Boylston St., Boston, MA 02116 Attn: Marc Recht.

7.6 **Entire Agreement.** This Agreement (including the Exhibits and Schedules hereto) constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

7.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

7.8 Amendment; Waiver and Termination. This Agreement may be amended, modified or terminated (other than pursuant to **Section 7.3** above) and the observance of any term hereof may be waived (other than pursuant to **Section 5.2(g)** above), either generally or in a particular instance and either retroactively or prospectively, only by a written instrument executed by (a) the Company, (b) the holders of a majority of the outstanding Common Stock, and Preferred Stock held by the Key Holders then providing services to the Company as employees or consultants and (c) the holders of (i) a majority of the then outstanding shares of Preferred Stock (voting as a single class and on an as-converted basis), (ii) at least sixty-five percent (65%) of the then outstanding shares of Series C Preferred Stock and (iii) at least sixty percent (60%) of the then outstanding shares of Series B Preferred Stock; provided, however, that **Section 2** shall not be amended to waive or eliminate the right of any Stockholders to designate a member of the Board without the consent of such Stockholder or defined group of Stockholders, as applicable. Any amendment, modification, termination or waiver so effected shall be binding upon the Company and the Stockholders and all of their respective successors and permitted assigns whether or not such party, assignee or other stockholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors or Key Holders, respectively, in the same fashion, (ii) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver is not directly applicable to the rights of the Key Holders hereunder or does not adversely affect the rights of the Key Holders in a manner that is different than the effect on the rights of the other parties hereto, and (iii) the consent of the Company shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver does not result in a material expansion of the Company's obligations under this Agreement. The Company shall give prompt written notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination or waiver. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision. Notwithstanding the foregoing, (x) **Sections 1.9, 1.10, 1.11, 1.69** (including that Transfer Stock is determinative of Stockholder transfer restrictions/obligations under Section 3), **2.2(b), 2.2(e), 5.1(f)(iv)**, the second to last sentence of **Section 5.2(g), 7.9(c)**

and this clause (x) shall not be amended, modified or waived without the written consent of Cormorant, (y) the last sentence of **Sections 5.2(g), 1.69** (including that Transfer Stock is determinative of Stockholder transfer restrictions/obligations under Section 3) and this clause (y) shall not be amended, modified or waived without the written consent of AJU; provided, however, that the aforementioned consent right of AJU under clause (y) of this **Section 7.8** shall terminate if AJU has not purchased 670,000 shares of Series C Preferred Stock by June 1, 2016.

7.9 Assignment of Rights.

(a) The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(b) Subject to **Section 7.9(c)** below, the rights of the Investors hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except by (1) an Investor that is an entity, to an Affiliate or a venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Investor, or (2) an Investor that is a natural person, to such Investor's Immediate Family Member or trust for the benefit of an individual Investor or one or more of such Investor's Immediate Family Members. As a condition to the assignment of rights by any Investor, as a precondition to such assignment, the transferee shall become a party to this Agreement as an "Investor."

(c) In connection with sale, transfer, assignment or other disposition of shares of Series C Preferred Stock originally purchased by Cormorant or AJU under the Purchase Agreement, the respective rights of Cormorant and AJU hereunder are assignable without the Company's written consent, provided, however, that the assignee agrees to become a party to this Agreement. Notwithstanding the previous sentence, except in connection with an assignment of rights hereunder to an Affiliate or a venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, Cormorant, or the right of Cormorant to designate one director as set forth in **Section 2.2(b)** and the rights of Cormorant set forth in **5.1(f)(iv)** are not assignable without (i) the approval of a majority of the total number of directors then serving on the Board, (ii) the assignee agreeing to become a party to this Agreement simultaneously with the transfer of such shares and (iii) ; and the proposed transferee' purchasing, acquiring or receiving at least 673,128 shares of Series C Preferred Stock in connection with such assignment of rights. For the avoidance of doubt, once the right of Cormorant to designate one director as set forth in **Section 2.2(b)** and the rights of Cormorant set forth in **5.1(f)(iv)** are assigned, Cormorant shall no longer be entitled to exercise or possess such rights regardless of how many shares of Capital Stock (of any class or series) it shall hold following such assignment.

(d) The rights of the Key Holders hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except to such Key Holder's Immediate Family Member or trust for the benefit of

such Key Holder or one or more of such Key Holder's Immediate Family Members. As a condition to the assignment of rights by any Key Holder, as a precondition to such assignment, the transferee shall become a party to this Agreement as an "Key Holder."

(e) Except in connection with an assignment by the Company by operation of law to the acquirer of the Company, the rights and obligations of the Company hereunder may not be assigned under any circumstances.

7.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

7.11 Governing Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of Delaware without giving effect to the principles of conflicts of law.

7.12 Jurisdiction, Venue, and Service of Process. If any party commences a lawsuit or other proceeding relating to or arising from this Agreement, the parties hereto agree that the United States District Court for the Eastern District of North Carolina shall have sole and exclusive jurisdiction over any such proceeding. If all such courts lack federal subject matter jurisdiction, the parties agree that the courts of the State of North Carolina in Wake County shall have sole and exclusive jurisdiction. The parties (a) agree that any of these courts shall be proper venue for any such lawsuit or judicial proceeding, (b) waive any objection to such venue, (c) consent to and agree to submit to the jurisdiction of any of the courts specified herein and agree to accept service of process to vest personal jurisdiction over them in any of these courts, and (d) agree that process in any action or proceeding referred to herein may be served on any party anywhere in the world.

7.13 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

7.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

7.15 Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Investor shall be entitled to specific performance of the agreements and obligations of the Company and the Stockholders hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

7.16 Additional Key Holders. In the event that after the date of this Agreement the Company issues Common Stock to any Person who is not currently a Key Holder, such that such Person subsequently holds at least one percent (1%) of the Capital

Stock, the Company shall, as a condition to such issuance, cause such Person to execute a counterpart signature page hereto as a Key Holder, and such person shall thereby be bound by, and subject to, all the terms and provisions of this Agreement applicable to a Key Holder.

7.17 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, whether pursuant to the Purchase Agreement or otherwise, any purchaser of such shares of Preferred Stock shall become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**COMPANY:**

G1 THERAPEUTICS, INC.

/s/ Mark A. Velleca

Name: Mark A. Velleca, M.D., Ph.D.

Title: President and Chief Executive Officer

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS:**

**CRMA SPV, L.P.**

By: /s/ Bihua Chen  
Name: Bihua Chen  
Title: Managing Member of the Special Limited Partner

**CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP**

By: /s/ Bihua Chen  
Name: Bihua Chen  
Title: Managing member of the GP

**CORMORANT PRIVATE HEALTHCARE FUND I, LP**

By: /s/ Bihua Chen  
Name: Bihua Chen  
Title: Managing member of the GP

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**



IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**AJU GROWTH & HEALTHCARE FUND**

By: /s/ Ji-Won Kim

Name: Ji-Won Kim

Title: Chief Executive Officer

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**COWEN PRIVATE INVESTMENTS LP**

**By: Cowen Private Investments GP LLC**

**Its: General Partner**

By: /s/ Owen Littman

Name: Owen Littman

Title: Authorized Signatory

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**FRANKLIN STRATEGIC SERIES – FRANKLIN  
BIOTECHNOLOGY DISCOVERY FUND**

**By: Franklin Advisers, Inc., its Investment Manager**

By: /s/ Michael McCarthy

Name: Michael McCarthy

Title: EVP / Chief Investment Officer

**FRANKLIN TEMPLETON INVESTMENT FUNDS –  
FRANKLIN BIOTECHNOLOGY DISCOVERY FUND**

**By: Franklin Advisers, Inc., its Investment Manager**

By: /s/ Michael McCarthy

Name: Michael McCarthy

Title: EVP / Chief Investment Officer

**SIGNATURE PAGE TO  
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IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**ROCK SPRINGS CAPITAL MASTER FUND LP**

**By: Rock Springs General Partner LLC**

**Its: General Partner**

By: /s/ Graham McPhail

Name: Graham McPhail

Title: Managing Director

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**ESHELMAN VENTURES, LLC**

By: /s/ Fred Eshelman

Name: Fred Eshelman

Title: Manager

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**RA CAPITAL HEALTHCARE FUND, L.P.**

By: /s/ Nicholas McGrath  
Name: Nicholas McGrath  
Title: Authorized Signatory

**BLACKWELL PARTNERS LLC – SERIES A**

By: /s/ Jannine Lail  
Name: Jannine Lail  
Title: Authorized Signatory

By: /s/ Abayomi Adigun  
Name: Abayomi Adigun  
Title: Authorized Signatory

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

**INVESTORS (cont'd):**

**LUMIRA CAPITAL II, L.P.**

By its general partner Lumira Capital GP, L.P.

By its general partner Lumira GP Inc.

By: /s/ Benjamin Rovinski

Name: Benjamin Rovinski

Title: Senior Vice-President

By: /s/ Vasco Larcina

Name: Vasco Larcina

Title: VP Finance

**LUMIRA CAPITAL II (INTERNATIONAL), L.P.**

By its general partner Lumira Capital GP, L.P.

By its general partner Lumira GP Inc.

By: /s/ Benjamin Rovinski

Name: Benjamin Rovinski

Title: Senior Vice-President

By: /s/ Vasco Larcina

Name: Vasco Larcina

Title: VP Finance

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**BOXER CAPITAL, LLC**

By: /s/ Aaron Davis

Name: Aaron Davis

Title: CEO

**MVA INVESTORS, LLC**

By: /s/ Aaron Davis

Name: Aaron Davis

Title: CEO

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**



IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**HATTERAS VENTURE PARTNERS IV SBIC, LP**

By: Hatteras Venture Advisors IV SBIC, LLC,  
its General Partner

By: /s/ Clay Thorp

Name: Clay B. Thorp

Title: Manager, Member

**HATTERAS NC FUND, LP**

By: Hatteras Venture Advisors IV, LLC,  
its General Partner

By: /s/ Clay Thorp

Name: Clay B. Thorp

Title: Manager, Member

**L2 VENTURES, LLC**

By: /s/ Michael Dial

Name: Michael Dial

Title: Manager

**SIGNATURE PAGE TO  
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IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**MEDIMMUNE VENTURES, INC.**

By: /s/ Ron Laufer  
Name: Ron Laufer  
Title: Senior Managing Director

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**MGC VENTURE PARTNERS 2013, L.P.**

By: MGC Venture Partners 2013 GP, LLC  
its General Partner

By: /s/ Joe C. Cook Jr.

Name: Joe C. Cook, Jr.

Title: Managing Member

/s/ Joe C. Cook Jr.

Joe C. Cook, Jr.

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

/s/ Glenn Muir

Glenn Muir

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**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**INVESTORS (cont'd):**

**ALEXANDRIA EQUITIES, LLC,**  
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC., a Maryland  
corporation, managing member

By: /s/ Dean A. Shigenaga  
Name: Dean A Shigenaga  
Title: Executive Vice President; Chief Financial Officer

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Stockholders' Agreement as of the date first written above.

**KEY HOLDERS:**

/s/ Norman E. Sharpless, M.D.

Norman E. Sharpless, M.D.

/s/ Martha Sharpless

Martha Sharpless

/s/ Kwok-Kin Wong, M.D., Ph.D.

Kwok-Kin Wong, M.D., Ph.D.

Jay Strum, Ph.D.

Francis Tavares, Ph.D.

John Bisi

Patrick Roberts

Claudia Black

Thomas Laund

**SIGNATURE PAGE TO  
THIRD AMENDED AND RESTATED STOCKHOLDERS AGREEMENT**

## SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT

THIS SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT is made and entered into as of the 27th day of April, 2016, by and among G1 Therapeutics, Inc., a Delaware corporation (the “**Company**”), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an “**Investor**”.

**RECITALS**

WHEREAS, the Company and certain of its investors are parties to that certain Amended and Restated Registration Rights Agreement dated as of February 4, 2015 (the “**Original Agreement**”);

WHEREAS, the Company and certain of the Investors (as noted on Schedule A) (the “**Series C Investors**”) are parties to the Series C Preferred Stock Purchase Agreement of even date herewith (the “**Series C Purchase Agreement**”);

WHEREAS, in order to induce the Company to enter into the Series C Purchase Agreement and to induce the Series C Investors to invest funds in the Company pursuant to the Series C Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors; and

WHEREAS, in accordance with Section 3.5 of the Original Agreement, the Company and the requisite Holders described therein hereby amend and restate the Original Agreement by virtue of the adoption of this Agreement which shall supersede and replace the Original Agreement in its entirety.

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 “**Affiliate**” means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 “**Board of Directors**” means the Board of Directors of the Company.

1.3 “**Company**” has the meaning set forth in the Preamble.

1.4 “**Common Stock**” means shares of Common Stock of the Company, \$0.0001 par value per share.

1.5 “**Damages**” means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or

state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.6 “**Demand Notice**” has the meaning set forth in [Section 2.1\(a\)](#).

1.7 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

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

1.9 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.11 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.12 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.13 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, registered domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.14 “**Initiating Holders**” means the S-1 Initiating Holders or the S-3 Initiating Holders, as applicable.

1.15 “**Investor(s)**” has the meaning set forth in the Preamble.



1.16 “**Investor Director Equity Compensation**” means any equity compensation that the Company, upon the direction of a member of the Board of Directors that is designated by an Investor or an Affiliate thereof (each such director, an “**Investor Designee**”), pays directly to such Investor or Affiliate thereof and that would have otherwise been payable to the Investor Designee in recognition of such Investor Designee’s service on the Board of Directors.

1.17 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.18 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.19 “**Preferred Stock**” means the Series 1 Preferred Stock, the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock.

1.20 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company acquired by the Investors prior to or after the date hereof (including without limitation any Investor Director Equity Compensation); and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) - (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 3.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.12 of this Agreement.

1.21 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to convertible securities that are Registrable Securities.

1.22 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2.11(b) hereof.

1.23 “**S-1 Initiating Holders**” means the Holders of (i) at least sixty-five percent (65%) of the voting power of the Series C Preferred Stock and (ii) at least sixty percent (60%) of the voting power of the Series B Preferred Stock demanding registration under Section 2.1(a).

1.24 “**S-3 Initiating Holders**” has the meaning set forth in Section 2.1(b).

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

1.26 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.27 “**SEC Rule 144(b)**” means Rule 144(b) promulgated by the SEC under the Securities Act.

1.28 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.29 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.30 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.31 “**Selling Holder Counsel**” has the meaning set forth in Section 2.6.

1.32 “**Series 1 Preferred Stock**” means the Series 1 Preferred Stock, \$0.0001 par value per share, of the Company.

1.33 “**Series A Preferred Stock**” means the Series A Preferred Stock, \$0.0001 par value per share, of the Company.

1.34 “**Series B Preferred Stock**” means the Series B Preferred Stock, \$0.0001 par value per share of the Company.

1.35 “**Series C Preferred Stock**” means the Series C Preferred Stock, \$0.0001 par value per share of the Company.

2. Registration Rights. The Company covenants and agrees as follows:

2.1. Demand Registration.

(a) Form S-1 Demand. At any time after the earlier of (i) six (6) years after the date hereof or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from the S-1 Initiating Holders that the Company file a Form S-1 registration statement with an anticipated aggregate offering price, net of Selling Expenses, of at least \$10 million), then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the S-1 Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the S-1 Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the S-1 Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least ten percent (10%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million (the “**S-3 Initiating**”

Holders”), then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the S-3 Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the S-3 Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of [Section 2.1\(c\)](#) and [Section 2.3](#).

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this [Section 2.1](#) a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Company’s Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing for a period of not more than ninety (90) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to [Section 2.1\(a\)](#) (i) during the period that is sixty (60) days before the Company’s good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to [Section 2.1\(a\)](#); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to [Section 2.1\(b\)](#). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to [Section 2.1\(b\)](#) (i) during the period that is thirty (30) days before the Company’s good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to [Section 2.1\(b\)](#) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as “effected” for purposes of this [Section 2.1\(d\)](#) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration pursuant to [Section 2.6](#), in which case such withdrawn registration shall be counted as “effected” for purposes of this [Section 2.1\(d\)](#).

2.2. Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3. Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company, subject to the reasonable approval of a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters

and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering or (ii) the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Section 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Section 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4. Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to two hundred seventy (270) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

- (c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;
- (d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;
- (e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;
- (f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;
- (g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;
- (h) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;
- (i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and
- (j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5. Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6. Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$50,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a); provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information, then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7. Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8. Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any "underwriter" (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such

expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any "underwriter" (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.



(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9. Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company (at any time after the Company has become subject to such reporting requirements); and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10. Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of at least a majority of the Registrable Securities then outstanding (voting as a single class and on an as-converted basis), which majority must include the Holders of (a) at least sixty-five percent (65%) of the then-outstanding shares of Series C Preferred Stock and (b) at least sixty percent (60%) of the then-outstanding shares of Series B Preferred Stock, enter into any agreement with any Holder or prospective holder of any securities of the Company that (i) would allow such Holder or prospective holder (i) to include such securities in any registration unless, under the terms of such agreement, such Holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included, or (ii) allow such Holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

2.11. Restrictions on Transfer.

(a) Without limiting any other applicable limitations on transfer, the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder or Investor will cause any proposed purchaser, pledgee, or transferee of the Registrable Securities held by such Holder or Investor to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate or instrument representing (i) the Series 1 Preferred Stock, (ii) the Series A Preferred Stock, (iii) the Series B Preferred Stock, (iv) Series C Preferred Stock (v) the Registrable Securities and (vi) any other securities issued in respect of the securities referenced in clauses (i) through (v), upon any stock split, stock dividend, recapitalization, merger,

consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.11(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO DISTRIBUTION OR RESALE, AND MAY NOT BE SOLD, MORTGAGED, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT FOR SUCH SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND ANY APPLICABLE STATE SECURITIES LAWS, OR THE AVAILABILITY OF AN EXEMPTION FROM THE REGISTRATION PROVISIONS OF THE SECURITIES ACT OF 1933, AS AMENDED, AND APPLICABLE STATE SECURITIES LAWS. COPIES OF THE SERIES C PREFERRED STOCK PURCHASE AGREEMENT, THE THIRD AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT, AS AMENDED AND/OR RESTATED FROM TIME TO TIME, AND THE SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT, AS AMENDED AND/OR RESTATED FROM TIME TO TIME, PROVIDING FOR RESTRICTIONS ON TRANSFER OF THESE SECURITIES MAY BE OBTAINED UPON WRITTEN REQUEST BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF THE COMPANY AT THE PRINCIPAL EXECUTIVE OFFICES OF THE COMPANY.

THE CORPORATION IS AUTHORIZED TO ISSUE MORE THAN ONE CLASS OR SERIES OF STOCK. THE CORPORATION WILL FURNISH WITHOUT CHARGE TO EACH STOCKHOLDER WHO SO REQUESTS THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL, OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OR SERIES THEREOF AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND/OR RIGHTS.

Each Holder and Investor consents to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.11.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall,

and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a “no action” letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the holder to the Company. The Company will not require such a legal opinion or “no action” letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such holder distributes Restricted Securities to an Affiliate of such holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Section 2.11. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.11(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.12. Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of:

- (a) the closing of a “Liquidation Event”, as such term is defined in the Company’s Fifth Amended and Restated Certificate of Incorporation;
- (b) the date when all of such Holder’s Registrable Securities could be sold without restriction under SEC Rule 144(b); and
- (c) the fifth anniversary of the IPO.

3. Miscellaneous.

3.1. Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder’s Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder’s Immediate Family Members; or (iii) after such transfer, holds the lesser of (x) one hundred percent (100%) of the transferor’s Registrable Securities prior to such transfer and (y) 300,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (A) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (B) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder’s Immediate Family Member; or (3) that is a trust for

the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided, that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

3.2. Counterparts; Facsimile. This Agreement may be executed and delivered by facsimile or .PDF format signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.3. Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

3.4. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on the signature page or Schedule A or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 3.4. If notice is given to the Company, a copy shall also be sent to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111, Attention: Jonathan L. Kravetz, and, if notice is given to the Investors, a copy shall also be given to Cooley LLP, 500 Boylston Street, Boston, Massachusetts 02116, Attention: Marc Recht.

3.5. Amendments and Waivers. This Agreement may be terminated or amended, and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only by a written instrument executed by: (i) the Company, (ii) the Holders holding at least a majority of the Registrable Securities then held by all of the Holders (voting as a single class and on an as-converted basis), (iii) the Holders of at least sixty-five percent (65%) of the then-outstanding shares of Series C Preferred Stock and (iv) the Holders of at least sixty percent (60%) of the then-outstanding shares of Series B Preferred Stock. Notwithstanding the foregoing:

(i) In the event that any such amendment or waiver would, by its terms, treat in a discriminatory manner a single Holder or Investor (or group of Holders or Investors), such amendment or waiver shall also require the written consent of the Holder or Investor (or a majority in interest of the group of such Holders or Investors) so adversely affected; and

(ii) any provision hereof may be waived by the waiving party on such party's own behalf, without the consent of any other party.

The Company shall give prompt written notice of any amendment, termination or waiver hereunder to any party that did not consent in writing thereto. Any amendment, termination or waiver effected in accordance with this Section 3.5 shall be binding on each party and all of such party's successors and permitted assigns, whether or not any such party, successor or assignee entered into or approved such amendment, termination or waiver.

3.6. Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

3.7. Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

3.8. Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series C Preferred Stock after the date hereof, whether pursuant to the Purchase Agreement or otherwise, any purchaser of such shares of Series C Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

3.9. Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

3.10. Governing Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of Delaware without giving effect to the principles of conflicts of law.

3.11. Jurisdiction, Venue, and Service of Process. If any party commences a lawsuit or other proceeding relating to or arising from this Agreement, the parties hereto agree that the United States District Court for the Eastern District of North Carolina shall have sole and exclusive jurisdiction over any such proceeding. If all such courts lack federal subject matter jurisdiction, the parties agree that the courts of the State of North Carolina in Wake County shall have sole and exclusive jurisdiction. The parties (a) agree that any of these courts shall be proper venue for any such lawsuit or judicial proceeding, (b) waive any objection to such venue, (c) consent to and agree to submit to the jurisdiction of any of the courts specified herein and agree to accept service of process to vest personal jurisdiction over them in any of these courts, and (d) agree that process in any action or proceeding referred to herein may be served on any party anywhere in the world.

3.12. Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Signature Page Follows.]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**COMPANY:**

**G1 THERAPEUTICS, INC.**

By: /s/ Mark A. Velleca

Name: Mark A. Velleca

Title: President and Chief Executive Officer

[Signature Page to Second Amended and Restated Registration Rights Agreement]



**INVESTORS:**

**CRMA SPV, L.P.**

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member of the Special Limited Partner

**CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP**

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing member of the GP

**CORMORANT PRIVATE HEALTHCARE FUND I, LP**

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing member of the GP

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**AJU GROWTH & HEALTHCARE FUND**

By: /s/ Ji-Won Kim

Name: Ji-Won Kim

Title: Chief Executive Officer

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**COWEN PRIVATE INVESTMENTS LP**

**By: Cowen Private Investments GP LLC**

**Its: General Partner**

By: /s/ Owen Littman

Name: Owen Littman

Title: Authorized Signatory

[Signature Page to Second Amended and Restated Registration Rights Agreement]

**INVESTORS (cont'd):**

**FRANKLIN STRATEGIC SERIES – FRANKLIN BIOTECHNOLOGY  
DISCOVERY FUND**

**By: Franklin Advisers, Inc., its Investment Manager**

By: /s/ Michael McCarthy

Name: Michael McCarthy

Title: EVP / Chief Investment Officer

**FRANKLIN TEMPLETON INVESTMENT FUNDS – FRANKLIN  
BIOTECHNOLOGY DISCOVERY FUND**

**By: Franklin Advisers, Inc., its Investment Manager**

By: /s/ Michael McCarthy

Name: Michael McCarthy

Title: EVP / Chief Investment Officer

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**ROCK SPRINGS CAPITAL MASTER FUND LP**

**By: Rock Springs General Partner LLC**

**Its: General Partner**

By: /s/ Graham McPhail

Name: Graham McPhail

Title: Managing Director

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**ESHELMAN VENTURES, LLC**

By: /s/ Fred Eshelman

Name: Fred Eshelman

Title: Manager

[Signature Page to Second Amended and Restated Registration Rights Agreement]

**INVESTORS (cont'd):**

**RA CAPITAL HEALTHCARE FUND, L.P.**

By: /s/ Nicholas McGrath

Name: Nicholas McGrath

Title: Authorized Signatory

**BLACKWELL PARTNERS LLC – SERIES A**

By: /s/ Jannine Lail

Name: Jannine Lail

Title: Authorized Signatory

By: /s/ Abayomi Adigun

Name: Abayomi Adigun

Title: Authorized Signatory

[Signature Page to Second Amended and Restated Registration Rights Agreement]

**INVESTORS (cont'd):**

**LUMIRA CAPITAL II, L.P.**

By its general partner Lumira Capital GP, L.P.  
By its general partner Lumira GP Inc.

By: /s/ Benjamin Rovinski  
Name: Benjamin Rovinski  
Title: Senior Vice-President

By: /s/ Vasco Larcina  
Name: Vasco Larcina  
Title: VP Finance

**LUMIRA CAPITAL II (INTERNATIONAL), L.P.**

By its general partner Lumira Capital GP, L.P.  
By its general partner Lumira GP Inc.

By: /s/ Benjamin Rovinski  
Name: Benjamin Rovinski  
Title: Senior Vice-President

By: /s/ Vasco Larcina  
Name: Vasco Larcina  
Title: VP Finance

[Signature Page to Second Amended and Restated Registration Rights Agreement]



IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**BOXER CAPITAL, LLC**

By: /s/ Aaron Davis

Name: Aaron Davis

Title: CEO

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**MEDIMMUNE VENTURES, INC.**

By: /s/ Ron Laufer  
Name: Ron Laufer  
Title: Senior Managing Director

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**HATTERAS VENTURE PARTNERS IV SBIC, LP**

Hatteras Venture Advisors IV SBIC, LLC,  
its General Partner

By: /s/ Clay Thorp

Name: Clay B. Thorp

Title: Manager, Member

**HATTERAS NC FUND, LP**

By: Hatteras Venture Advisors IV, LLC,  
its General Partner

By: /s/ Clay Thorp

Name: Clay B. Thorp

Title: Manager, Member

**L2 VENTURES, LLC**

By: /s/ Michael Dial

Name: Michael Dial

Title: Manager

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**MGC VENTURE PARTNERS 2013, L.P.**

By: MGC Venture Partners 2013 GP, LLC  
Its: General Partner

By: /s/ Joe C. Cook Jr.  
Name: Joe C. Cook, Jr.  
Title: Managing Member

/s/ Joe C. Cook Jr.  
Joe C. Cook, Jr.

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**ALEXANDRIA EQUITIES, LLC,**  
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC.,  
a Maryland corporation, managing member

By: /s/ Dean A. Shigenaga  
Name: Dean A Shigenaga  
Title: Executive Vice President; Chief Financial Officer

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

/s/ Norman E. Sharpless, M.D.

Norman E. Sharpless, M.D.

/s/ Martha Sharpless, M.D.

Martha Sharpless, M.D.

/s/ Kwok-Kin Wong, M.D., Ph.D.

Kwok-Kin Wong, M.D., Ph.D.

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

**MVA INVESTORS, LLC**

By: /s/ Aaron Davis

Name: Aaron Davis

Title: CEO

[Signature Page to Second Amended and Restated Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Registration Rights Agreement as of the date first written above.

**INVESTORS (cont'd):**

/s/ Glenn Muir

Glenn Muir

[Signature Page to Second Amended and Restated Registration Rights Agreement]



**SIXTH AMENDMENT TO  
G1 THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

THIS SIXTH AMENDMENT to the G1 Therapeutics, Inc. 2011 Equity Incentive Plan is dated as of November 7, 2016.

WHEREAS, the Board of Directors (the "Board") of G1 Therapeutics, Inc. (the "Company"), previously adopted, and the stockholders of the Company previously approved, the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended by that certain First Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated August 27, 2012, that certain Second Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated October 8, 2013, that certain Third Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated February 4, 2015, that certain Fourth Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan, dated December 10, 2015, and that certain Fifth Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan, dated April 27, 2016 (collectively referred to herein as the "Plan");

WHEREAS, the Board and the stockholders deem it to be in the best interests of the Company to further amend the Plan in order to increase the number of shares of Common Stock of the Company that may be issued under the Plan from 12,601,925 shares to 13,201,925.

NOW, THEREFORE, the Plan shall be amended as follows:

1. The first sentence of Paragraph 2.1 shall be deleted in its entirety and the following substituted in lieu thereof:

"Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be Thirteen Million Two Hundred One Thousand Nine Hundred Twenty-Five (13,201,925)."

2. Except as herein amended, the terms and provisions of the Plan, as amended, shall remain in full force and effect as originally adopted and approved.

*(Next page is signature page)*

IN WITNESS WHEREOF, the undersigned hereby certifies that this Sixth Amendment was duly adopted by the Board of Directors and the stockholders of the Company, effective as of the date first above written.

G1 THERAPEUTICS, INC.

By: /s/ Mark A. Velleca, M.D., Ph.D  
Mark A. Velleca, M.D., Ph.D.  
President and Chief Executive Officer

[Signature Page to Sixth Amendment to Stock Plan]

**FIFTH AMENDMENT TO  
G1 THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

THIS FIFTH AMENDMENT to the G1 Therapeutics, Inc. 2011 Equity Incentive Plan is dated as of April 27, 2016.

WHEREAS, the Board of Directors (the "Board") of G1 Therapeutics, Inc. (the "Company"), previously adopted, and the stockholders of the Company previously approved, the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended by that certain First Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated August 27, 2012, that certain Second Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated October 8, 2013, that certain Third Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated February 4, 2015 and that certain Fourth Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan, dated December 10, 2015 (collectively referred to herein as the "Plan");

WHEREAS, the Board and the stockholders deem it to be in the best interests of the Company to further amend the Plan in order to increase the number of shares of Common Stock of the Company that may be issued under the Plan from 10,051,925 shares to 12,601,925.

NOW, THEREFORE, the Plan shall be amended as follows:

2. The first sentence of Paragraph 2.1 shall be deleted in its entirety and the following substituted in lieu thereof:

"Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be Twelve Million Six Hundred One Thousand Nine Hundred Twenty-Five (12,601,925)."

3. Except as herein amended, the terms and provisions of the Plan, as amended, shall remain in full force and effect as originally adopted and approved.

*(Next page is signature page)*

IN WITNESS WHEREOF, the undersigned hereby certifies that this Fifth Amendment was duly adopted by the Board of Directors and the stockholders of the Company, effective as of the date first above written.

G1 THERAPEUTICS, INC.

By: /s/ Mark A. Velleca, M.D., Ph.D  
Mark A. Velleca, M.D., Ph.D.  
President and Chief Executive Officer

[Signature Page to Fifth Amendment to Stock Plan]

**FOURTH AMENDMENT TO  
G1 THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

THIS FOURTH AMENDMENT to the G1 Therapeutics, Inc. 2011 Equity Incentive Plan is dated as of December 10, 2015.

WHEREAS, the Board of Directors (the **"Board"**) of G1 Therapeutics, Inc. (the **"Company"**), previously adopted, and the stockholders of the Company previously approved, the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended by that certain First Amendment to G1 Therapeutics, Inc. Equity Incentive Plan dated August 27, 2012, that certain Second Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated October 8, 2013 and that certain Third Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated February 4, 2015 (collectively referred to herein as the **"Plan"**);

WHEREAS, the Board deems it to be in the best interests of the Company to further amend the Plan in order to increase the number of shares of Common Stock of the Company that may be issued under the Plan from 8,051,925 shares to 10,051,925.

NOW, THEREFORE, the Plan shall be amended as follows:

1. The first sentence of Paragraph 2.1 shall be deleted in its entirety and the following substituted in lieu thereof:

"Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be Ten Million Fifty-One Thousand Nine Hundred Twenty-Five (10,051,925)."

2. Except as herein amended, the terms and provisions of the Plan, as amended, shall remain in full force and effect as originally adopted and approved.

*(Next page is signature page)*

IN WITNESS WHEREOF, the undersigned hereby certifies that this Fourth Amendment was duly adopted by the Board of Directors and the stockholders of the Company, effective as of the date first above written.

G1 THERAPEUTICS, INC.

By: /s/ Mark A. Velleca  
Mark A. Velleca, President

[Signature Page to Fourth Amendment to Stock Plan]

**THIRD AMENDMENT TO  
G1 THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

THIS THIRD AMENDMENT to the G1 Therapeutics, Inc. 2011 Equity Incentive Plan is dated as of February 4, 2015.

WHEREAS, the Board of Directors (the **“Board”**) of G1 Therapeutics, Inc. (the **“Company”**), previously adopted, and the stockholders of the Company previously approved, the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended by that certain First Amendment to G1 Therapeutics, Inc. Equity Incentive Plan dated August 27, 2012 and that certain Second Amendment to G1 Therapeutics, Inc. 2011 Equity Incentive Plan dated October 8, 2013 (collectively referred to herein as the **“Plan”**);

WHEREAS, the Board deems it to be in the best interests of the Company to further amend the Plan in order to increase the number of shares of Common Stock of the Company that may be issued under the Plan from 4,700,217 to 8,051,925 shares.

NOW, THEREFORE, the Plan shall be amended as follows:

1. The first sentence of Paragraph 2.1 shall be deleted in its entirety and the following substituted in lieu thereof:

“Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be Eight Million Fifty-One Thousand Nine Hundred Twenty-Five (8,051,925).”

2. Except as herein amended, the terms and provisions of the Plan, as amended, shall remain in full force and effect as originally adopted and approved.

*(Next page is signature page)*

IN WITNESS WHEREOF, the undersigned hereby certifies that this Third Amendment was duly adopted by the Board of Directors and the stockholders of the Company, effective as of the date first above written.

GI THERAPEUTICS, INC.

By: /s/ Mark A. Velleca  
Mark A. Velleca, President

[Signature Page to Third Amendment to Stock Plan]



**SECOND AMENDMENT TO  
G-ZERO THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

THIS SECOND AMENDMENT to the G-Zero Therapeutics, Inc. 2011 Equity Incentive Plan is dated as of October 8, 2013.

WHEREAS, the Board of Directors (the **"Board"**) of G1 Therapeutics, Inc., previously known as G-Zero Therapeutics, Inc. (the **"Company"**) previously adopted, and the stockholders of the Company previously approved, the G-Zero Therapeutics, Inc. 2011 Equity Incentive Plan, as amended by that certain First Amendment to G-Zero Therapeutics, Inc. Equity Incentive Plan dated August 27, 2012 (collectively referred to herein as the **"Plan"**);

WHEREAS, the Board deems it to be in the best interests of the Company to further amend the Plan in order to reflect the Company's new name and increase the number of shares of Common Stock of the Company that may be issued under the Plan from 1,719,780 to 4,700,217 shares.

NOW, THEREFORE, the Plan shall be amended as follows:

1. The name of the Plan shall be the "G1 Therapeutics, Inc. 2011 Equity Incentive Plan".
2. The first sentence of Paragraph 2.1 shall be deleted in its entirety and the following substituted in lieu thereof:  
"Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be Four Million Seven Hundred Thousand Two Hundred Seventeen (4,700,217)."
3. Except as herein amended, the terms and provisions of the Plan, as amended, shall remain in full force and effect as originally adopted and approved.

*(Next page is signature page)*

IN WITNESS WHEREOF, the undersigned hereby certifies that this Second Amendment was duly adopted by the Board of Directors and the stockholders of the Company, effective as of the date first above written.

GI THERAPEUTICS, INC.

By: /s/ Jay Strum, Ph.D.  
Jay Strum, Ph.D., President

**FIRST AMENDMENT TO THE G-ZERO THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

This First Amendment to the G-Zero Therapeutics, Inc. 2011 Equity Incentive Plan (the “**Plan**”) is effective August 27, 2011.

WHEREAS, the Board of Directors (the “**Board**”) of G-Zero Therapeutics, Inc., a Delaware corporation (the “**Company**”), adopted and the stockholders of the Company approved the Plan; and

WHEREAS, the Board and the stockholders of the Company approved this amendment of the Plan in order to increase the number of shares of Common Stock of the Company issuable pursuant to awards granted under the Plan by 719,780 shares, from 1,000,000 to 1,719,780 shares.

NOW, THEREFORE, the Plan shall be amended as follows:

1. The first sentence of Paragraph 2.1 of the Plan is deleted in its entirety and the following substituted in lieu thereof:

“Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be One Million Seven Hundred Nineteen Thousand Seven Hundred and Eighty (1,719,780).”

2. Except as amended herein, the terms and provisions of the Plan shall remain unchanged and in full force and effect.

[Remainder of Page Intentionally Left Blank]

**G-ZERO THERAPEUTICS, INC.**

By: /s/ Jay Strum

Name: Jay Strum, PhD.

Title: President

**G-ZERO THERAPEUTICS, INC.  
2011 EQUITY INCENTIVE PLAN**

**As Adopted on March 3, 2011**

**1. PURPOSE.** The purpose of this Plan is to provide incentives to attract, retain and motivate eligible persons whose present and potential contributions are important to the success of the Company, its Parent and Subsidiaries by offering eligible persons an opportunity to participate in the Company's future performance through the grant of Awards covering Shares. Capitalized terms not defined in the text are defined in Section 14 hereof. Although this Plan is intended to be a written compensatory benefit plan within the meaning of Rule 701, grants may be made pursuant to this Plan that do not qualify for exemption under Rule 701 or Section 25102(o). Any requirement of this Plan that is required in law only because of Section 25102(o) need not apply if the Committee so provides.

**2. SHARES SUBJECT TO THE PLAN.**

**2.1 Number of Shares Available.** Subject to Sections 2.2 and 11 hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan will be One Million (1,000,000) Shares. Subject to Sections 2.2, 4.10 and 11 hereof, Shares subject to Awards that are cancelled, forfeited, settled in cash or that expire by their terms will again be available for grant and issuance in connection with other Awards. At all times the Company will reserve and keep available a sufficient number of Shares as will be required to satisfy the requirements of all Awards granted and outstanding under this Plan.

**2.2 Adjustment of Shares.** In the event that the number of outstanding shares of the Company's Common Stock is changed by a stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification or similar change in the capital structure of the Company without consideration, then (a) the number of Shares reserved for issuance under this Plan, (b) the Exercise Prices of and number of Shares subject to outstanding Options and SARs, and (c) the Purchase Prices of and/or number of Shares subject to other outstanding Awards will be proportionately adjusted, subject to any required action by the Board or the stockholders of the Company and compliance with applicable securities laws; *provided, however*, that fractions of a Share will not be issued but will either be paid in cash at the Fair Market Value of such fraction of a Share or will be rounded down to the nearest whole Share, as determined by the Committee; and *provided, further*, that the Exercise Price of any Option or SAR may not be decreased to below the par value of the Shares.

**3. PLAN FOR BENEFIT OF SERVICE PROVIDERS.**

**3.1 Eligibility.** The Committee will have the authority to select persons to receive Awards. ISOs (as defined in Section 4 hereof) may be granted only to employees (including officers and directors who are also employees) of the Company or of a Parent or Subsidiary of the Company. NQSOs (as defined in Section 4 hereof) and all other types of Awards may be granted to employees, officers, directors and consultants of the Company or any Parent or Subsidiary of the Company; *provided* such consultants render bona fide services not in connection with the offer and sale of securities in a capital-raising transaction when Rule 701 is to apply to the Award granted for such services. A person may be granted more than one Award under this Plan.

**3.2 No Obligation to Employ.** Nothing in this Plan or any Award granted under this Plan will confer or be deemed to confer on any Participant any right to continue in the employ of, or to continue any other relationship with, the Company or any Parent or Subsidiary or limit in any way the right of the Company or any Parent or Subsidiary to terminate Participant's employment or other relationship at any time, with or without Cause.

**4. OPTIONS.** The Committee may grant Options to eligible persons described in Section 3 hereof and will determine whether such Options will be Incentive Stock Options within the meaning of the Code (“*ISOs*”) or Nonqualified Stock Options (“*NQSOs*”), the number of Shares subject to the Option, the Exercise Price of the Option, the period during which the Option may be exercised, and all other terms and conditions of the Option, subject to the following.

**4.1 Form of Option Grant.** Each Option granted under this Plan will be evidenced by an Award Agreement which will expressly identify the Option as an ISO or an NQSO (“*Stock Option Agreement*”), and will be in such form and contain such provisions (which need not be the same for each Participant) as the Committee may from time to time approve, and which will comply with and be subject to the terms and conditions of this Plan.

**4.2 Date of Grant.** The date of grant of an Option will be the date on which the Committee makes the determination to grant such Option, unless a later date is otherwise specified by the Committee. The Stock Option Agreement and a copy of this Plan will be delivered to the Participant within a reasonable time after the granting of the Option.

**4.3 Exercise Period.** Options may be exercisable immediately but subject to repurchase pursuant to Section 10 hereof or may be exercisable within the times or upon the events determined by the Committee as set forth in the Stock Option Agreement governing such Option; *provided, however*, that (a) no Option will be exercisable after the expiration of ten (10) years from the date the Option is granted; and (b) no ISO granted to a person who directly or by attribution owns more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of any Parent or Subsidiary (“*Ten Percent Stockholder*”) will be exercisable after the expiration of five (5) years from the date the ISO is granted. The Committee also may provide for Options to become exercisable at one time or from time to time, periodically or otherwise, in such number of Shares or percentage of Shares as the Committee determines.

**4.4 Exercise Price.** The Exercise Price of an Option will be determined by the Committee when the Option is granted and shall not be less than the Fair Market Value per Share unless expressly determined in writing by the Committee on the Option’s date of grant; *provided* that the Exercise Price of an ISO granted to a Ten Percent Stockholder will not be less than one hundred ten percent (110%) of the Fair Market Value of the Shares on the date of grant. Payment for the Shares purchased must be made in accordance with Section 8 hereof.

**4.5 Method of Exercise.** Options may be exercised only by delivery to the Company of a written stock option exercise agreement (the “*Exercise Agreement*”) in a form approved by the Committee (which need not be the same for each Participant). The Exercise Agreement will state (a) the number of Shares being purchased, (b) the restrictions imposed on the Shares purchased under such Exercise Agreement, if any, and (c) such representations and agreements regarding Participant’s investment intent and access to information and other matters, if any, as may be required or desirable by the Company to comply with applicable securities laws. Each Participant’s Exercise Agreement may be modified by (i) written agreement of Participant and the Company or (ii) substitution by the Company, upon becoming a public company, in order to add the payment terms set forth in Section 8.1 that apply to a public company and such other terms as shall be necessary or advisable in order to exercise a public company option. Upon exercise of an Option, Participant shall execute and deliver to the Company the Exercise Agreement then in effect, together with payment in full of the Exercise Price for the number of Shares being purchased and payment of any applicable taxes.

**4.6 Termination.** Subject to earlier termination pursuant to Sections 11 and 13.1 hereof and notwithstanding the exercise periods set forth in the Stock Option Agreement, exercise of an Option will always be subject to the following terms and conditions.

4.6.1 **Other than Death or Disability or for Cause.** If the Participant is Terminated for any reason other than death, Disability or for Cause, then the Participant may exercise such Participant's Options only to the extent that such Options are exercisable as to Vested Shares upon the Termination Date or as otherwise determined by the Committee. Such Options must be exercised by the Participant, if at all, as to all or some of the Vested Shares calculated as of the Termination Date or such other date determined by the Committee, within three (3) months after the Termination Date (or within such shorter time period, not less than thirty (30) days, or within such longer time period, not exceeding five (5) years, after the Termination Date as may be determined by the Committee, with any exercise beyond three (3) months after the Termination Date deemed to be an NQSO) but in any event, no later than the expiration date of the Options.

4.6.2 **Death or Disability.** If the Participant is Terminated because of Participant's death or Disability (or the Participant dies within three (3) months after a Termination other than for Cause), then Participant's Options may be exercised only to the extent that such Options are exercisable as to Vested Shares by Participant on the Termination Date or as otherwise determined by the Committee. Such options must be exercised by Participant (or Participant's legal representative or authorized assignee), if at all, as to all or some of the Vested Shares calculated as of the Termination Date or such other date determined by the Committee, within twelve (12) months after the Termination Date (or within such shorter time period, not less than six (6) months, or within such longer time period, not exceeding five (5) years, after the Termination Date as may be determined by the Committee, with any exercise beyond (a) three (3) months after the Termination Date when the Termination is for any reason other than the Participant's death or disability, within the meaning of Section 22(e)(3) of the Code, or (b) twelve (12) months after the Termination Date when the Termination is for Participant's disability, within the meaning of Section 22(e)(3) of the Code, deemed to be an NQSO) but in any event no later than the expiration date of the Options.

4.6.3 **For Cause.** If the Participant is terminated for Cause, the Participant may exercise such Participant's Options, but not to an extent greater than such Options are exercisable as to Vested Shares upon the Termination Date and Participant's Options shall expire on such Participant's Termination Date, or at such later time and on such conditions as are determined by the Committee.

**4.7 Limitations on Exercise.** The Committee may specify a reasonable minimum number of Shares that may be purchased on any exercise of an Option, *provided* that such minimum number will not prevent Participant from exercising the Option for the full number of Shares for which it is then exercisable.

**4.8 Limitations on ISOs.** The aggregate Fair Market Value (determined as of the date of grant) of Shares with respect to which ISOs are exercisable for the first time by a Participant during any calendar year (under this Plan or under any other incentive stock option plan of the Company or any Parent or Subsidiary of the Company) will not exceed One Hundred Thousand Dollars (\$100,000). If the Fair Market Value of Shares on the date of grant with respect to which ISOs are exercisable for the first time by a Participant during any calendar year exceeds One Hundred Thousand Dollars (\$100,000), then the Options for the first One Hundred Thousand Dollars (\$100,000) worth of Shares to become exercisable in such calendar year will be ISOs and the Options for the amount in excess of One Hundred Thousand Dollars (\$100,000) that become exercisable in that calendar year will be NQSOs. In the event that the Code or the regulations promulgated thereunder are amended after the Effective Date (as defined

in Section 13.1 hereof) to provide for a different limit on the Fair Market Value of Shares permitted to be subject to ISOs, then such different limit will be automatically incorporated herein and will apply to any Options granted after the effective date of such amendment.

**4.9 Modification, Extension or Renewal.** The Committee may modify, extend or renew outstanding Options and authorize the grant of new Options in substitution therefor, *provided* that any such action may not, without the written consent of a Participant, impair any of such Participant's rights under any Option previously granted. Any outstanding ISO that is modified, extended, renewed or otherwise altered will be treated in accordance with Section 424(h) of the Code. Subject to Section 4.10 hereof, the Committee may reduce the Exercise Price of outstanding Options without the consent of Participants by a written notice to them; *provided, however*, that the Exercise Price may not be reduced below the minimum Exercise Price that would be permitted under Section 4.4 hereof for Options granted on the date the action is taken to reduce the Exercise Price; *provided, further*, that the Exercise Price will not be reduced below the par value of the Shares, if any.

**4.10 No Disqualification.** Notwithstanding any other provision in this Plan, no term of this Plan relating to ISOs will be interpreted, amended or altered, nor will any discretion or authority granted under this Plan be exercised, so as to disqualify this Plan under Section 422 of the Code or, without the consent of the Participant, to disqualify any Participant's ISO under Section 422 of the Code. In no event shall the total number of Shares issued (counting each reissuance of a Share that was previously issued and then forfeited or repurchased by the Company as a separate issuance) under the Plan upon exercise of ISOs exceed 1,000,000 Shares (adjusted in proportion to any adjustments under Section 2.2 hereof) over the term of the Plan.

**5. RESTRICTED STOCK.** A Restricted Stock Award is an offer by the Company to sell to an eligible person Shares that are subject to certain specified restrictions. The Committee will determine to whom an offer will be made, the number of Shares the person may purchase, the Purchase Price, the restrictions to which the Shares will be subject, and all other terms and conditions of the Restricted Stock Award, subject to the following terms and conditions.

**5.1 Form of Restricted Stock Award.** All purchases under a Restricted Stock Award made pursuant to this Plan will be evidenced by an Award Agreement ("**Restricted Stock Purchase Agreement**") that will be in such form (which need not be the same for each Participant) as the Committee will from time to time approve, and will comply with and be subject to the terms and conditions of this Plan. The Restricted Stock Award will be accepted by the Participant's execution and delivery of the Restricted Stock Purchase Agreement and full payment for the Shares to the Company within thirty (30) days from the date the Restricted Stock Purchase Agreement is delivered to the person. If such person does not execute and deliver the Restricted Stock Purchase Agreement along with full payment for the Shares to the Company within such thirty (30) days, then the offer will terminate, unless otherwise determined by the Committee.

**5.2 Purchase Price.** The Purchase Price of Shares sold pursuant to a Restricted Stock Award will be determined by the Committee on the date the Restricted Stock Award is granted or at the time the purchase is consummated. Payment of the Purchase Price must be made in accordance with Section 8 hereof.

**5.3 Restrictions.** Restricted Stock Awards may be subject to the restrictions set forth in Sections 9 and 10 hereof or, with respect to a Restricted Stock Award to which Section 25102(o) is to apply, such other restrictions not inconsistent with Section 25102(o).



## **6. RESTRICTED STOCK UNITS.**

**6.1 Awards of Restricted Stock Units.** A Restricted Stock Unit (“RSU”) is an Award covering a number of Shares that may be settled in cash, or by issuance of those Shares at a date in the future. No Purchase Price shall apply to an RSU settled in Shares other than the payment of the aggregate par value of all Shares issuable upon such settlement. All grants of Restricted Stock Units will be evidenced by an Award Agreement that will be in such form (which need not be the same for each Participant) as the Committee will from time to time approve, and will comply with and be subject to the terms and conditions of this Plan.

**6.2 Form and Timing of Settlement.** To the extent permissible under applicable law, the Committee may permit a Participant to defer payment under a RSU to a date or dates after the RSU is earned, *provided* that the terms of the RSU and any deferral satisfy the requirements of Section 409A of the Code (or any successor) and any regulations or rulings promulgated thereunder. Payment may be made in the form of cash or whole Shares or a combination thereof, all as the Committee determines.

## **7. STOCK APPRECIATION RIGHTS.**

**7.1 Awards of SARs.** Stock Appreciation Rights (“SARs”) may be settled in cash, or Shares (which may consist of Restricted Stock or RSUs), having a value equal to the value determined by multiplying the difference between the Fair Market Value on the date of exercise over the Exercise Price and the number of Shares with respect to which the SAR is being settled. All grants of SARs made pursuant to this Plan will be evidenced by an Award Agreement that will be in such form (which need not be the same for each Participant) as the Committee will from time to time approve, and will comply with and be subject to the terms and conditions of this Plan.

**7.2 Exercise Period and Expiration Date.** A SAR will be exercisable within the times or upon the occurrence of events determined by the Committee and set forth in the Award Agreement governing such SAR. The Award Agreement shall set forth the Expiration Date; *provided* that no SAR will be exercisable after the expiration of ten years from the date the SAR is granted.

**7.3 Exercise Price.** The Committee will determine the Exercise Price of the SAR when the SAR is granted, and which may not be less than the Fair Market Value on the date of grant and may be settled in cash or in Shares.

**7.4 Termination.** Subject to earlier termination pursuant to Sections 11 and 13.1 hereof and notwithstanding the exercise periods set forth in the Award Agreement, exercise of SARs will always be subject to the following terms and conditions.

**7.4.1 Other than Death or Disability or for Cause.** If the Participant is Terminated for any reason other than death, Disability or for Cause, then the Participant may exercise such Participant’s SARs only to the extent that such SARs are exercisable as to vested Shares upon the Termination Date or as otherwise determined by the Committee. SARs must be exercised by the Participant, if at all, as to all or some of the vested Shares calculated as of the Termination Date or such other date determined by the Committee, within three (3) months after the Termination Date (or within such shorter time period, not less than thirty (30) days, or within such longer time period, not exceeding five (5) years, after the Termination Date as may be determined by the Committee) but in any event, no later than the expiration date of the SARs.

7.4.2 **Death or Disability.** If the Participant is Terminated because of Participant's death or Disability (or the Participant dies within three (3) months after a Termination other than for Cause), then Participant's SARs may be exercised only to the extent that such SARs are exercisable as to vested Shares by Participant on the Termination Date or as otherwise determined by the Committee. Such SARs must be exercised by Participant (or Participant's legal representative or authorized assignee), if at all, as to all or some of the vested Shares calculated as of the Termination Date or such other date determined by the Committee, within twelve (12) months after the Termination Date (or within such shorter time period, not less than six (6) months, or within such longer time period, not exceeding five (5) years, after the Termination Date as may be determined by the Committee) but in any event no later than the expiration date of the SARs.

7.4.3 **For Cause.** If the Participant is terminated for Cause, the Participant may exercise such Participant's SARs, but not to an extent greater than such SARs are exercisable as to vested Shares upon the Termination Date and Participant's SARs shall expire on such Participant's Termination Date, or at such later time and on such conditions as are determined by the Committee.

## **8. PAYMENT FOR PURCHASES AND EXERCISES.**

**8.1 Payment in General.** Payment for Shares acquired pursuant to this Plan may be made in cash (by check) or, where expressly approved for the Participant by the Committee and where permitted by law:

(a) by cancellation of indebtedness of the Company owed to the Participant;

(b) by surrender of shares of the Company that are clear of all liens, claims, encumbrances or security interests and: (i) for which the Company has received "full payment of the purchase price" within the meaning of SEC Rule 144 (and, if such shares were purchased from the Company by use of a promissory note, such note has been fully paid with respect to such shares) or (ii) that were obtained by Participant in the public market;

(c) by tender of a full recourse promissory note having such terms as may be approved by the Committee and bearing interest at a rate sufficient to avoid imputation of income under Sections 483 and 1274 of the Code; *provided, however*, that Participants who are not employees or directors of the Company will not be entitled to purchase Shares with a promissory note unless the note is adequately secured by collateral other than the Shares; *provided, further*, that the portion of the Exercise Price or Purchase Price, as the case may be, equal to the par value of the Shares must be paid in cash or other legal consideration permitted by the laws under which the Company is then incorporated or organized;

(d) by waiver of compensation due or accrued to the Participant from the Company for services rendered;

(e) by participating in a formal cashless exercise program implemented by the Committee in connection with the Plan;

(f) subject to compliance with applicable law and solely in the discretion of the Committee, by exercising as set forth below, provided that a public market for the Company's Common Stock exists:

(i) through a "same day sale" commitment from the Participant and a broker-dealer whereby the Participant irrevocably elects to exercise

the Award and to

sell a portion of the Shares so purchased sufficient to pay the total Exercise Price or Purchase Price, and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price or Purchase Price directly to the Company; or

(g) (ii) through a “margin” commitment from the Participant and a broker-dealer whereby the Participant irrevocably elects to exercise the Award and to pledge the Shares so purchased to the broker-dealer in a margin account as security for a loan from the broker-dealer in the amount of the total Exercise Price or Purchase Price, and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price or Purchase Price directly to the Company; or

(h) by any combination of the foregoing or any other method of payment approved by the Committee.

## **8.2 Withholding Taxes.**

(a) 8.2.1 Withholding Generally. Whenever Shares are to be issued in satisfaction of Awards granted under this Plan, the Company may require the Participant to remit to the Company an amount sufficient to satisfy applicable tax withholding requirements prior to the delivery of any certificate or certificates for such Shares. Whenever, under this Plan, payments in satisfaction of Awards are to be made in cash by the Company, such payment will be net of an amount sufficient to satisfy applicable tax withholding requirements.

(b) 8.2.2 Stock Withholding. When, under applicable tax laws, a Participant incurs tax liability in connection with the exercise or vesting of any Award that is subject to tax withholding and the Participant is obligated to pay the Company the amount required to be withheld, the Committee may in its sole discretion allow the Participant to satisfy the minimum tax withholding obligation by electing to have the Company withhold from the Shares to be issued up to the minimum number of Shares having a Fair Market Value on the date that the amount of tax to be withheld is to be determined that is not more than the minimum amount to be withheld; but in no event will the Company withhold Shares if such withholding would result in adverse accounting consequences to the Company. Any elections by a Participant to have Shares withheld for this purpose will be made in accordance with the requirements established by the Committee for such elections and be in writing in a form acceptable to the Committee.

## **9. RESTRICTIONS ON AWARDS.**

9.1 Transferability. Except as permitted by the Committee, Awards granted under this Plan, and any interest therein, will not be transferable or assignable by Participant, other than by will or by the laws of descent and distribution, and, with respect to NQSOs, by instrument to an inter vivos or testamentary trust in which the NQSOs are to be passed to beneficiaries upon the death of the trustor (settlor), or by gift to a “family member” as that term is defined in Rule 701, and may not be made subject to execution, attachment or similar process. During the lifetime of the Participant an Award will be exercisable only by the Participant or Participant’s legal representative and any elections with respect to an Award may be made only by the Participant or Participant’s legal representative. The terms of an Option shall be binding upon the executor, administrator, successors and assigns of the Participant who is a party thereto.

9.2 Securities Law and Other Regulatory Compliance. Although this Plan is intended to be a written compensatory benefit plan within the meaning of Rule 701 promulgated under the Securities Act, grants may be made pursuant to this Plan that do not qualify for exemption under Rule 701

or Section 25102(o). Any requirement of this Plan which is required in law only because of Section 25102(o) need not apply with respect to a particular Award to which Section 25102(o) will not apply. An Award will not be effective unless such Award is in compliance with all applicable federal and state securities laws, rules and regulations of any governmental body, and the requirements of any stock exchange or automated quotation system upon which the Shares may then be listed or quoted, as they are in effect on the date of grant of the Award and also on the date of exercise or other issuance. Notwithstanding any other provision in this Plan, the Company will have no obligation to issue or deliver certificates for Shares under this Plan prior to (a) obtaining any approvals from governmental agencies that the Company determines are necessary or advisable, and/or (b) compliance with any exemption, completion of any registration or other qualification of such Shares under any state or federal law or ruling of any governmental body that the Company determines to be necessary or advisable. The Company will be under no obligation to register the Shares with the SEC or to effect compliance with the exemption, registration, qualification or listing requirements of any state securities laws, stock exchange or automated quotation system, and the Company will have no liability for any inability or failure so do.

**9.3 Exchange and Buyout of Awards.** The Committee may, at any time or from time to time, authorize the Company, with the consent of the respective Participants, to issue new Awards in exchange for the surrender and cancellation of any or all outstanding Awards. The Committee may at any time buy from a Participant an Award previously granted with payment in cash, Shares (including Restricted Stock) or other consideration, based on such terms and conditions as the Committee and the Participant may agree.

## **10. RESTRICTIONS ON SHARES.**

**10.1 Privileges of Stock Ownership.** No Participant will have any of the rights of a stockholder with respect to any Shares until such Shares are issued to the Participant. After Shares are issued to the Participant, the Participant will be a stockholder and have all the rights of a stockholder with respect to such Shares, including the right to vote and receive all dividends or other distributions made or paid with respect to such Shares; *provided*, that if such Shares are Restricted Stock, then any new, additional or different securities the Participant may become entitled to receive with respect to such Shares by virtue of a stock dividend, stock split or any other change in the corporate or capital structure of the Company will be subject to the same restrictions as the Restricted Stock. The Participant will have no right to retain such stock dividends or stock distributions with respect to Unvested Shares that are repurchased as described in this Section 10.

**10.2 Rights of First Refusal and Repurchase.** At the discretion of the Committee, the Company may reserve to itself and/or its assignee(s) in the Award Agreement (a) a right of first refusal to purchase all Shares that a Participant (or a subsequent transferee) may propose to transfer to a third party, *provided* that such right of first refusal terminates upon the Company's initial public offering of Common Stock pursuant to an effective registration statement filed under the Securities Act and (b) a right to repurchase Unvested Shares held by a Participant for cash and/or cancellation of purchase money indebtedness owed to the Company by the Participant following such Participant's Termination at any time.

**10.3 Escrow; Pledge of Shares** To enforce any restrictions on a Participant's Shares, the Committee may require the Participant to deposit all certificates representing Shares, together with stock powers or other instruments of transfer approved by the Committee, appropriately endorsed in blank, with the Company or an agent designated by the Company to hold in escrow until such restrictions have lapsed or terminated. The Committee may cause a legend or legends referencing such restrictions to be placed on the certificate. Any Participant who is permitted to execute a promissory note as partial or full consideration for the purchase of Shares under this Plan will be required to pledge and deposit with

the Company all or part of the Shares so purchased as collateral to secure the payment of Participant's obligation to the Company under the promissory note; *provided, however*, that the Committee may require or accept other or additional forms of collateral to secure the payment of such obligation and, in any event, the Company will have full recourse against the Participant under the promissory note notwithstanding any pledge of the Participant's Shares or other collateral. In connection with any pledge of the Shares, Participant will be required to execute and deliver a written pledge agreement in such form as the Committee will from time to time approve. The Shares purchased with the promissory note may be released from the pledge on a pro rata basis as the promissory note is paid.

**10.4 Securities Law Restrictions.** All certificates for Shares or other securities delivered under this Plan will be subject to such stock transfer orders, legends and other restrictions as the Committee may deem necessary or advisable, including restrictions under any applicable federal, state or foreign securities law, or any rules, regulations and other requirements of the SEC or any stock exchange or automated quotation system upon which the Shares may be listed or quoted.

## **11. CORPORATE TRANSACTIONS.**

**11.1 Assumption or Replacement of Awards by Successor or Acquiring Entity.** If an Acquisition or Other Combination shall occur, then any or all outstanding Awards may be assumed, converted or replaced by the successor or acquiring entity (if any) of such Acquisition or Other Combination (or by any of its Parents, if any), which assumption, conversion or replacement will be binding on all Participants. In the alternative, any successor or acquiring entity in such Acquisition or Other Combination (or any of its Parents, if any) may substitute equivalent awards for outstanding Awards or provide substantially similar consideration to Participants in respect of their outstanding Awards as was provided to stockholders of the Company in such Acquisition or Other Combination after taking into account the existing provisions of the outstanding Awards (except that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code). Any successor or acquiring entity in such Acquisition or Other Combination (or any of its Parents, if any) may also substitute by issuing, in place of any Award of outstanding Shares of the Company held by a Participant, substantially similar shares of stock or other property subject to repurchase restrictions and other provisions no less favorable to such Participant than those that applied to such outstanding Shares immediately prior to such Acquisition or Other Combination.

**11.2 Awards Not Assumed or Replaced in an Acquisition.** If, in the event of an Acquisition, neither the successor or acquiring entity (if any) nor any Parent (if any) of such successor or acquiring entity assumes, converts, replaces or substitutes outstanding Awards as provided above in Section 11.1, then notwithstanding any other provision in this Plan to the contrary, and unless otherwise approved by the Committee or otherwise required by the terms of any Award Agreement or any separate written agreement governing such Award that has been approved by the Board, each such Award that has not already terminated in accordance with the Plan or the applicable Award Agreement shall terminate, without accelerating vesting, immediately prior to the consummation of such Acquisition (or if such Acquisition is an Acquisition by Sale of Assets, immediately prior to the Company's distribution of any funds or assets to the Company's stockholders following such Acquisition by Sale of Assets) at such times and upon such conditions as the Committee may determine.

**11.3 Assumption of Awards by the Company.** The Company, from time to time, also may substitute or assume outstanding awards granted by another entity, whether in connection with an acquisition of such other entity or otherwise, by either (a) granting an Award under this Plan in substitution of such other entity's award or (b) assuming and/or converting such award as if it had been granted under this Plan if the terms of such assumed award could be applied to an Award granted under

this Plan. Such substitution or assumption will be permissible if the holder of the substituted or assumed award would have been eligible to be granted an Award under this Plan if the other entity had applied the rules of this Plan to such grant. In the event the Company assumes an award granted by another entity, the terms and conditions of such award will remain unchanged (except that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code). In the event the Company elects to grant a new Option or SAR rather than assuming an existing option or stock appreciation right, such new Option or SAR may be granted with a similarly adjusted Exercise Price.

## **12. ADMINISTRATION.**

**12.1 Committee Authority.** This Plan will be administered by the Committee or the Board if no Committee is created by the Board. Subject to the general purposes, terms and conditions of this Plan, and to the direction of the Board, the Committee will have full power to implement and carry out this Plan. Without limitation, the Committee will have the authority to:

- (a) construe and interpret this Plan, any Award Agreement and any other agreement or document executed pursuant to this Plan;
- (b) prescribe, amend, expand, modify and rescind or terminate rules and regulations relating to this Plan;
- (c) approve persons to receive Awards;
- (d) determine the form and terms of Awards;
- (e) determine the number of Shares or other consideration subject to Awards granted under this Plan;
- (f) determine whether Awards will be granted singly, in combination with, in tandem with, in replacement of, or as alternatives to, other Awards under this Plan or awards under any other incentive or compensation plan of the Company or any Parent or Subsidiary of the Company;
- (g) grant waivers of any conditions of this Plan or any Award;
- (h) determine the terms of vesting, exercisability and payment of Awards to be granted pursuant to this Plan;
- (i) correct any defect, supply any omission, or reconcile any inconsistency in this Plan, any Award, any Award Agreement, any Exercise Agreement or any Restricted Stock Purchase Agreement;
- (j) determine whether an Award has been earned;
- (k) extend the vesting period beyond a Participant's Termination Date; and
- (l) make all other determinations necessary or advisable in connection with the administration of this Plan.

**12.2 Committee Composition and Discretion.** The Board may delegate full administrative authority over the Plan and Awards to a Committee consisting of at least one member of the Board (or such greater number as may then be required by applicable law). Unless in contravention of any express terms of this Plan or Award, any determination made by the Committee with respect to any Award will be made in its sole discretion either (a) at the time of grant of the Award, or (b) subject to Section 4.9 hereof, at any later time. Any such determination will be final and binding on the Company

and on all persons having an interest in any Award under this Plan. To the extent permitted by applicable law, the Committee may delegate to one or more officers of the Company the authority to grant an Award under this Plan, provided that each such officer is a member of the Board.

**12.3 Nonexclusivity of the Plan.** Neither the adoption of this Plan by the Board, the submission of this Plan to the stockholders of the Company for approval, nor any provision of this Plan will be construed as creating any limitations on the power of the Board to adopt such additional compensation arrangements as it may deem desirable, including, without limitation, the granting of stock options and other equity awards otherwise than under this Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

**12.4 Governing Law.** This Plan and all agreements hereunder shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to that body of laws pertaining to conflict of laws.

### **13. EFFECTIVENESS, AMENDMENT AND TERMINATION OF THE PLAN.**

**13.1 Adoption and Stockholder Approval.** This Plan will become effective on the date that it is adopted by the Board (the “*Effective Date*”). This Plan will be approved by the stockholders of the Company (excluding Shares issued pursuant to this Plan), consistent with applicable laws, within twelve (12) months before or after the Effective Date. Upon the Effective Date, the Board may grant Awards pursuant to this Plan; provided, however, that: (a) no Option or SAR may be exercised prior to initial stockholder approval of this Plan; (b) no Option or SAR granted pursuant to an increase in the number of Shares approved by the Board shall be exercised prior to the time such increase has been approved by the stockholders of the Company; (c) in the event that initial stockholder approval is not obtained within the time period provided herein, all Awards for which only the exemption from California’s securities qualification requirements provided by Section 25102(o) can apply shall be canceled, any Shares issued pursuant to any such Award shall be canceled and any purchase of such Shares issued hereunder shall be rescinded; and (d) Awards (to which only the exemption from California’s securities qualification requirements provided by Section 25102(o) can apply) granted pursuant to an increase in the number of Shares approved by the Board which increase is not approved by stockholders within the time then required under Section 25102(o) shall be canceled, any Shares issued pursuant to any such Awards shall be canceled, and any purchase of Shares subject to any such Award shall be rescinded.

**13.2 Term of Plan.** Unless earlier terminated as provided herein, this Plan will terminate ten (10) years from the Effective Date or, if earlier, ten (10) years from the date of stockholder approval.

**13.3 Amendment or Termination of Plan.** Subject to Section 4.9 hereof, the Board may at any time (a) terminate or amend this Plan in any respect, including without limitation amendment of any form of Award Agreement or instrument to be executed pursuant to this Plan and (b) terminate any and all outstanding Options or SARs upon a dissolution or liquidation of the Company, followed by the payment of creditors and the distribution of any remaining funds to the Company’s stockholders; provided, however, that the Board will not, without the approval of the stockholders of the Company, amend this Plan in any manner that requires such stockholder approval pursuant to Section 25102(o) or pursuant to the Code or the regulations promulgated under the Code as such provisions apply to ISO plans.

**14. DEFINITIONS.** For all purposes of this Plan, the following terms will have the following meanings:

“**Acquisition**,” for purposes of Section 11, means:

(a) any consolidation or merger (other than a merger effected exclusively to change the domicile of the Company) in which the Company is a constituent entity or is a party in which the voting stock and other voting securities of the Company that are outstanding immediately prior to the consummation of such consolidation or merger represent, or are converted into, securities of the surviving entity of such consolidation or merger (or of any Parent of such surviving entity) that, immediately after the consummation of such consolidation or merger, together possess less than fifty percent (50%) of the total voting power of all voting securities of such surviving entity (or of any of its Parents, if any) that are outstanding immediately after the consummation of such consolidation or merger;

(b) a sale or other transfer by the holders thereof of outstanding voting stock and/or other voting securities of the Company possessing more than fifty percent (50%) of the total voting power of all outstanding voting securities of the Company, whether in one transaction or in a series of related transactions, pursuant to an agreement or agreements to which the Company is a party and that has been approved by the Board, and pursuant to which such outstanding voting securities are sold or transferred to a single person or entity, to one or more persons or entities who are Affiliates of each other, or to one or more persons or entities acting in concert; or

(c) the sale, lease, transfer or other disposition, in a single transaction or series of related transactions, by the Company and/or any Subsidiary or Subsidiaries of the Company, of all or substantially all the assets of the Company and its Subsidiaries taken as a whole, (or, if substantially all of the assets of the Company and its Subsidiaries taken as a whole are held by one or more Subsidiaries, the sale or disposition (whether by consolidation, merger, conversion or otherwise) of such Subsidiaries of the Company), except where such sale, lease, transfer or other disposition is made to the Company or one or more wholly owned Subsidiaries of the Company (an “**Acquisition by Sale of Assets**”).

“**Affiliate**” of a specified person means a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified (where, for purposes of this definition, the term “**control**” (including the terms **controlling**, **controlled by** and **under common control with**) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.

“**Award**” means any award pursuant to the terms and conditions of this Plan, including any Option, Restricted Stock Unit, Stock Appreciation Right or Restricted Stock Award.

“**Award Agreement**” means, with respect to each Award, the signed written agreement between the Company and the Participant setting forth the terms and conditions of the Award as approved by the Committee.

“**Board**” means the Board of Directors of the Company.

“**Cause**” means Termination because of (a) any willful, material violation by the Participant of any law or regulation applicable to the business of the Company or a Parent or Subsidiary of the Company, the Participant’s conviction for, or guilty plea to, a felony or a crime involving moral turpitude, or any willful perpetration by the Participant of a common law fraud, (b) the Participant’s commission of an act of personal dishonesty which involves personal profit in connection with the Company or any other entity having a business relationship with the Company, (c) any material breach by the Participant of any provision of any agreement or understanding between the Company or any Parent or Subsidiary of the Company and the Participant regarding the terms of the Participant’s service as an employee, officer,



director or consultant to the Company or a Parent or Subsidiary of the Company, including without limitation, the willful and continued failure or refusal of the Participant to perform the material duties required of such Participant as an employee, officer, director or consultant of the Company or a Parent or Subsidiary of the Company, other than as a result of having a Disability, or a breach of any applicable invention assignment and confidentiality agreement or similar agreement between the Company or a Parent or Subsidiary of the Company and the Participant, (d) Participant's disregard of the policies of the Company or any Parent or Subsidiary of the Company so as to cause loss, damage or injury to the property, reputation or employees of the Company or a Parent or Subsidiary of the Company, or (e) any other misconduct by the Participant which is materially injurious to the financial condition or business reputation of, or is otherwise materially injurious to, the Company or a Parent or Subsidiary of the Company.

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

“**Committee**” means the committee created and appointed by the Board to administer this Plan, or if no committee is created and appointed, the Board.

“**Company**” means G-Zero Therapeutics, Inc., or any successor corporation.

“**Disability**” means a disability, whether temporary or permanent, partial or total, as determined by the Committee.

“**Exercise Price**” means the price per Share at which a holder of an Option may purchase Shares issuable upon exercise of the Option.

“**Fair Market Value**” means, as of any date, the value of a share of the Company's Common Stock determined as follows:

(a) if such Common Stock is then publicly traded on a national securities exchange, its closing price on the date of determination on the principal national securities exchange on which the Common Stock is listed or admitted to trading as reported in The Wall Street Journal;

(b) if such Common Stock is publicly traded but is not listed or admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of determination as reported by The Wall Street Journal (or, if not so reported, as otherwise reported by any newspaper or other source as the Committee may determine); or

(c) if none of the foregoing is applicable to the valuation in question, by the Committee in good faith.

“**Option**” means an award of an option to purchase Shares pursuant to Section 4 of this Plan.

“**Other Combination**” for purposes of Section 11 means any (a) consolidation or merger in which the Company is a constituent entity and is not the surviving entity of such consolidation or merger or (b) any conversion of the Company into another form of entity; provided that such consolidation, merger or conversion does not constitute an Acquisition.

“**Parent**” of a specified entity means, any entity that, either directly or indirectly, owns or controls such specified entity, where for this purpose, “**control**” means the ownership of stock, securities or other interests that possess at least a majority of the voting power of such specified entity (including indirect ownership or control of such stock, securities or other interests).

“**Participant**” means a person who receives an Award under this Plan.

“**Plan**” means this 2011 Equity Incentive Plan, as amended from time to time.

“**Purchase Price**” means the price at which a Participant may purchase Restricted Stock pursuant to this Plan.

“**Restricted Stock**” means Shares purchased pursuant to a Restricted Stock Award under this Plan.

“**Restricted Stock Award**” means an award of Shares pursuant to Section 5 hereof.

“**Restricted Stock Unit**” or “**RSU**” means an award made pursuant to Section 6 hereof.

“**Rule 701**” means Rule 701 *et. seq* promulgated by the Commission under the Securities Act.

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

“**Section 25102(o)**” means Section 25102(o) of the California Corporations Code.

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

“**Shares**” means shares of the Company’s Common Stock, \$0.0001, par value per share, reserved for issuance under this Plan, as adjusted pursuant to Sections 2 and 11 hereof, and any successor security.

“**Stock Appreciation Right**” or “**SAR**” means an award granted pursuant to Section 7 hereof.

“**Subsidiary**” means any entity (other than the Company) in an unbroken chain of entities beginning with the Company if each of the entities other than the last entity in the unbroken chain owns stock or other equity securities representing fifty percent (50%) or more of the total combined voting power of all classes of stock or other equity securities in one of the other entities in such chain.

“**Termination**” or “**Terminated**” means, for purposes of this Plan with respect to a Participant, that the Participant has for any reason ceased to provide services as an employee, officer, director or consultant to the Company or a Parent or Subsidiary of the Company. A Participant will not be deemed to have ceased to provide services in the case of sick leave, military leave, or any other leave of absence approved by the Committee; *provided* that such leave is for a period of not more than ninety (90) days (a) unless reinstatement (or, in the case of an employee with an ISO, reemployment) upon the expiration of such leave is guaranteed by contract or statute, or (b) unless provided otherwise pursuant to formal policy adopted from time to time by the Company’s Board and issued and promulgated in writing. In the case of any Participant on sick leave, military leave or an approved leave of absence, the Committee may make such provisions respecting suspension of vesting of the Award while on leave from the Company or a Parent or Subsidiary of the Company as it may deem appropriate, except that in no event may an Option be exercised after the expiration of the term set forth in the Stock Option Agreement. The Committee will have sole discretion to determine whether a Participant has ceased to provide services and the effective date on which the Participant ceased to provide services (the “**Termination Date**”).

“**Unvested Shares**” means “**Unvested Shares**” as defined in the Award Agreement for an Award.

“**Vested Shares**” means “**Vested Shares**” as defined in the Award Agreement.

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G-ZERO THERAPEUTICS, INC.

2011 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

(Immediately Exercisable / Shares Subject to Repurchase)

This Stock Option Agreement (the "**Agreement**") is made and entered into as of the date of grant set forth below (the "**Date of Grant**") by and between G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the participant named below (the "**Participant**"). Capitalized terms not defined herein shall have the meaning ascribed to them in the Company's 2011 Equity Incentive Plan (the "**Plan**").

<u>Participant's Name</u>	<u>Option Shares</u>	<u>Exercise Price Per Share</u>	<u>Date of Grant</u>	<u>First Vesting Date</u>	<u>Expiration Date</u>
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**Classification of Participant** [ ] Exempt Employee OR [ ] Nonexempt Employee OR [ ] Non-employee

**Type of Stock Option:** [ ] Incentive Stock Option OR [ ] Nonqualified Stock Option

**Securities Law Exemptions to Apply:** \_\_\_\_\_

**1. GRANT OF OPTION.** The Company hereby grants to Participant an option (this "**Option**") to purchase the total number of shares of Common Stock, \$0.00001 par value per share, of the Company set forth above as Total Option Shares (the "**Shares**") at the Exercise Price Per Share set forth above (the "**Exercise Price**"), subject to all of the terms and conditions of this Agreement and the Plan. If designated as an Incentive Stock Option above, the Option is intended to qualify as an "incentive stock option" within the meaning of Section 422 of the Code, except that if on the Date of Grant the Participant is not subject to U.S. income tax, then this Option shall be a NQSO. This Option is not transferable.

**2. EXERCISE PERIOD.** This Option is immediately exercisable. However, the Shares issued upon exercise of the Option will be subject to Repurchase Option set forth in Section 6 of the Exercise Agreement containing a repurchase right on Unvested Shares. Shares that are vested pursuant to the schedule set forth in this Section 2 are "**Vested Shares.**" Shares that are not vested pursuant to such schedule are "**Unvested Shares.**" On the Date of Grant \_\_\_\_\_ of the Shares will be Unvested Shares (the "**Initial Unvested Shares**"). Provided Participant continues to provide services to the Company or any Subsidiary or Parent of the Company at all times from the Date of Grant until the First Vesting Date set forth above, then on the First Vesting Date one-fourth (1/4<sup>th</sup>) of the Initial Unvested Shares will become Vested Shares, and on the same day of each succeeding calendar month thereafter (or if there is no such day in any month, then the last day of such calendar month), an additional one forty-eighth 1/48<sup>th</sup> of the Initial Unvested Shares shall vest until (a) all of the Shares are vested, (b) the Termination Date or (c) vesting otherwise terminates pursuant to this Agreement or the Plan. If application of the vesting schedule above causes a fractional share, such share shall be rounded down to the nearest whole share for each month except for the last month in such vesting period, at the end of which last month the full remainder of the Shares shall become Vested Shares. The Option shall not be exercisable as to Unvested Shares after the Termination Date and shall expire on the Expiration Date set forth above or earlier as provided in Section 4 below in accordance with Section 4.6 of the Plan.

**3. MANNER OF EXERCISE.** To exercise this Option, Participant (or in the case of exercise after Participant's death or incapacity, Participant's executor, administrator, heir or legatee, as

the case may be) must deliver to the Company an executed stock option exercise agreement in the form attached hereto as Exhibit A, or in such other form as may be approved by the Committee from time to time (the "**Exercise Agreement**"). If someone other than Participant exercises the Option, then such person must submit documentation reasonably acceptable to the Company verifying that such person has the legal right to exercise the Option and such person shall be subject to all of the restrictions contained herein as if such person were the Participant. The Option may not be exercised unless such exercise is in compliance with all applicable securities laws, as they are in effect on the date of exercise. The Option may not be exercised as to fewer than one hundred (100) Shares unless it is exercised as to all Shares as to which the Option is then exercisable.

#### **4. TERMINATION.**

**4.1 Termination for Any Reason Except Death, Disability or Cause.** If Participant is Terminated for any reason, except death, Disability or for Cause, the Option, to the extent (and only to the extent) that it would have been exercisable by Participant on the Termination Date, may be exercised by Participant no later than three (3) months after the Termination Date, but in any event no later than the Expiration Date.

**4.2 Termination Because of Death or Disability.** If Participant is Terminated because of Participant's death or Disability (or Participant dies within three (3) months after Termination when Termination is for any reason other than Participant's Disability or for Cause), the Option, to the extent that it is exercisable by Participant on the Termination Date, may be exercised by Participant (or Participant's legal representative) no later than twelve (12) months after the Termination Date, but in any event no later than the Expiration Date. Any exercise beyond (a) three (3) months after the Termination Date when the Termination is for any reason other than the Participant's death or disability, within the meaning of Section 22(e)(3) of the Code; or (b) twelve (12) months after the Termination Date when the termination is for Participant's disability, within the meaning of Section 22(e)(3) of the Code, will be deemed to be the exercise of an NQSO.

**4.3 Termination for Cause.** If the Participant is terminated for Cause, Participant's Options shall expire on the Termination Date, or at such later time and on such conditions as are determined by the Committee.

**5. COMPLIANCE WITH LAWS AND REGULATIONS.** The Plan, this Agreement and the Exercise Agreement are intended to comply with Section 25102(o) and any regulations relating thereto. Any provision of this Agreement or the Exercise Agreement that is inconsistent with Section 25102(o) or any regulations relating thereto shall, without further act or amendment by the Company or the Board, be reformed to comply therewith.

**6. ENTIRE AGREEMENT.** The Plan is incorporated herein by reference. This Agreement, the Exercise Agreement and the Plan constitute the entire agreement of the parties and supersede all prior undertakings and agreements with respect to the subject matter hereof.

**7. ACCEPTANCE.** Participant hereby acknowledges receipt of a copy of the Plan, this Agreement and the Exercise Agreement. Participant has read and understands the terms and provisions thereof, and accepts the Option subject to all the terms and conditions of therein. The Exercise Price has been determined by the Committee based upon the best evidence available to the Committee and is intended to equal the Fair Market Value of the Shares as of the date of grant, or in some cases 110% of Fair Market Value, as required by the Code. However, the tax treatment of this Option is not guaranteed. Neither the Company, the Committee nor any of their designees shall be liable for any taxes, penalties or other monetary amounts owed by any Participant, employee, beneficiary or other person as a result of the

grant, amendment, modification, exercise and/or payment of, or under, any Award, notwithstanding any challenge made to the determination of Fair Market Value by any taxing authority. By accepting this Option, Participant acknowledges and agrees to the foregoing. Participant acknowledges that there may be adverse tax consequences upon exercise of the Option or disposition of the Shares and that Participant should consult a tax adviser prior to such exercise or disposition.

**8. EXECUTION.** This Agreement and the Exercise Agreement may be entered into in two or more counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement. This Agreement and the Exercise Agreement may be executed and delivered by facsimile and, upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

**IN WITNESS WHEREOF**, the Company has caused this Stock Option Agreement to be executed by its duly authorized representative and Participant has executed this Stock Option Agreement, effective as of the Date of Grant.

**G-ZERO THERAPEUTICS, INC.**

**PARTICIPANT**

By: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please print name and title)

\_\_\_\_\_  
(Please print name)

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**EXHIBIT A**

**FORM OF STOCK OPTION EXERCISE AGREEMENT**

G-ZERO THERAPEUTICS, INC.

2011 EQUITY INCENTIVE PLAN

STOCK OPTION EXERCISE AGREEMENT  
(Immediately Exercisable / Shares Subject to Repurchase)

This Stock Option Exercise Agreement (the "**Exercise Agreement**") is made and entered into as of \_\_\_\_\_, \_\_\_\_\_ by and between G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the purchaser named below (the "**Purchaser**"). Capitalized terms not defined herein shall have the meanings ascribed to them in the Company's 2011 Equity Incentive Plan (the "**Plan**").

<u>Name of Purchaser</u>	<u>Social Security Number:</u>	<u>Total Number of Shares:</u>	<u>Exercise Price Per Share:</u>	<u>Option No. or Date of Grant:</u>	<u>ISO or NQSO</u>
			\$		

**1. EXERCISE OF OPTION.**

**1.1 Agreement to Exercise.** Pursuant to exercise of that certain option (the "**Option**") granted to Purchaser under the Plan and subject to the terms and conditions of this Exercise Agreement, Purchaser hereby purchases from the Company, and the Company hereby sells to Purchaser, the Total Number of Shares set forth above (the "**Shares**") of the Company's Common Stock, \$0.0001 par value per share, at the Exercise Price Per Share set forth above (the "**Exercise Price**"). As used in this Exercise Agreement, the term "**Shares**" refers to the Shares purchased under this Exercise Agreement and includes all securities received (a) in replacement of the Shares, (b) as a result of stock dividends or stock splits with respect to the Shares, and (c) all securities received in replacement of the Shares in a merger, recapitalization, reorganization or similar corporate transaction.

**1.2 Payment.** Purchaser hereby delivers payment of the Exercise Price in the manner permitted in the Plan as follows (check and complete as appropriate):

- in cash (by check) in the amount of \$ \_\_\_\_\_, receipt of which is acknowledged by the Company.
- by cancellation of indebtedness of the Company currently owed to Purchaser in the amount of \$ \_\_\_\_\_.
- by the waiver hereby of compensation due or accrued for services previously rendered in the amount of \$ \_\_\_\_\_.
- provided that a public market for the Company's stock exists and subject to compliance with applicable law and solely in the discretion of the Committee: (a) through a "same day sale" commitment from Purchaser and broker-dealer whereby Purchaser irrevocably elects to exercise the Option and to sell a portion of the Shares so purchased sufficient to pay for the total Exercise Price and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price directly to the Company, or (b) through a "margin" commitment from Purchaser and a broker-dealer whereby Purchaser irrevocably elects to exercise the Option and to pledge the Shares so purchased to the Dealer in a margin account as security for a loan from the broker-dealer in the amount of the total Exercise Price, and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price directly to the Company.
- by delivery of fully-paid, nonassessable and vested shares of the Common Stock of the Company owned by Purchaser free and clear of all liens, claims, encumbrances or security interests, valued at the current Fair Market Value of \$ \_\_\_\_\_ per share (a) for which the Company has received "full payment of the purchase price" within the meaning of SEC Rule 144, (if purchased by use of a promissory note, such note has been fully paid with respect to such vested shares), or (b) that were obtained by Purchaser in the open public market.



## **2. DELIVERIES.**

**2.1 Documents and Payment to be Delivered.** Purchaser hereby delivers to the Company at its principal executive offices, Attn: President: (a) this completed and signed Exercise Agreement, (b) two (2) copies of a blank Stock Power and Assignment Separate from Stock Certificate in the form of Exhibit 1 attached hereto (the “**Stock Powers**”), both executed by Purchaser and Purchaser’s spouse, if any, (c) if Purchaser is married, a Consent of Spouse in the form of Exhibit 2 attached hereto (the “**Spouse Consent**”) executed by Purchaser’s spouse, and (d) the Exercise Price and payment or other provision for any applicable tax obligations (if paid by check, a copy of such check shall be attached hereto as Exhibit 3). Upon its receipt of the Exercise Price, payment or other provision for any applicable tax obligations and all the documents to be executed and delivered by Purchaser to the Company, the Company will issue a duly executed stock certificate evidencing the Shares in the name of Purchaser, or, if applicable, Purchaser’s estate, to be placed in escrow as provided in Section 7.2 until expiration or termination of the Company’s Refusal Right and Repurchase Option described in Sections 5 and 6.

**2.2 Tax Withholding.** Prior to the issuance of the Shares upon exercise of the Option, Purchaser must pay or provide for any applicable federal, state and local withholding obligations of the Company. If the Committee permits, Purchaser may provide for payment of withholding taxes upon exercise of the Option by requesting that the Company retain the minimum number of Shares with a Fair Market Value equal to the minimum amount of taxes required to be withheld; but in no event will the Company withhold Shares if such withholding would result in adverse accounting consequences to the Company. In such case, the Company shall issue the net number of Shares to the Purchaser by deducting the Shares retained from the Shares issuable upon exercise.

## **3. REPRESENTATIONS AND WARRANTIES OF PURCHASER.** Purchaser represents and warrants to the Company as follows.

**3.1 Agrees to Terms of the Plan.** Purchaser has received a copy of the Plan and the Stock Option Agreement, has read and understands the terms of the Plan, the Stock Option Agreement and this Exercise Agreement, and agrees to be bound by their terms and conditions. Purchaser acknowledges that there may be adverse tax consequences upon exercise of the Option or disposition of the Shares, and that Purchaser should consult a tax adviser prior to such exercise or disposition.

**3.2 Shares Not Registered or Qualified.** Purchaser understands and acknowledges that the Shares have not been registered with the SEC under the Securities Act, or with any securities regulatory agency administering any state securities laws, and that, notwithstanding any other provision of the Stock Option Agreement to the contrary, the exercise of any rights to purchase any Shares is expressly conditioned upon compliance with the Securities Act and all applicable state securities laws. Purchaser agrees to cooperate with the Company to ensure compliance with such laws.

**3.3 No Transfer Unless Registered or Exempt.** Purchaser understands that Purchaser may not transfer any Shares unless such Shares are registered under the Securities Act or qualified under applicable state securities laws or unless, in the opinion of counsel to the Company, exemptions from such registration and qualification requirements are available. Purchaser understands that only the Company may file a registration statement with the SEC and that the Company is under no obligation to do so with respect to the Shares. Purchaser has also been advised that exemptions from registration and qualification may not be available or may not permit Purchaser to transfer all or any of the Shares in the amounts or at the times proposed by Purchaser.

**3.4 SEC Rule 701.** Shares that are issued pursuant to SEC Rule 701 promulgated under the Securities Act and may become freely tradable by non-affiliates (under limited conditions regarding the method of sale) ninety (90) days after the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the SEC, subject to the lengthier market standoff agreement contained in Section 4 of this Exercise Agreement or any other agreement entered into by Purchaser. Affiliates must comply with the provisions (other than the holding period requirements) of Rule 144 which permits certain limited sales of unregistered securities. Rule 144 is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an “affiliate” of the Company or if “current public information” about the Company (as defined in Rule 144) is not publicly available.

**3.5 Access to Information.** Purchaser has had access to all information regarding the Company and its present and prospective business, assets, liabilities and financial condition that Purchaser reasonably considers important in making the decision to purchase the Shares, and Purchaser has had ample opportunity to ask questions of the Company’s representatives concerning such matters and this investment.

**3.6 Understanding of Risks.** Purchaser is fully aware of: (a) the highly speculative nature of the investment in the Shares; (b) the financial hazards involved; (c) the lack of liquidity of the Shares and the restrictions on transferability of the Shares (e.g., that Purchaser may not be able to sell or dispose of the Shares or use them as collateral for loans); (d) the qualifications and backgrounds of the management of the Company; and (e) the tax consequences of investment in the Shares.

**3.7 Purchase for Own Account for Investment.** Purchaser is purchasing the Shares for Purchaser’s own account for investment purposes only and not with a view to, or for sale in connection with, a distribution of the Shares within the meaning of the Securities Act. Purchaser has no present intention of selling or otherwise disposing of all or any portion of the Shares and no one other than Purchaser has any beneficial ownership of any of the Shares.

**3.8 No General Solicitation.** At no time was Purchaser presented with or solicited by any publicly issued or circulated newspaper, mail, radio, television or other form of general advertising or solicitation in connection with the offer, sale and purchase of the Shares.

**3.9 SEC Rule 144.** Purchaser has been advised that SEC Rule 144 promulgated under the Securities Act, which permits certain limited sales of unregistered securities, is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that use of a promissory note as payment for the Shares may not be deemed to be “full payment of the purchase price” within the meaning of Rule 144 unless certain conditions are met and that, accordingly, the Rule 144 holding period of such Shares may not

begin to run until such Shares are fully paid for within the meaning of Rule 144. Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an “affiliate” of the Company or if “current public information” about the Company (as defined in Rule 144) is not publicly available.

**4. MARKET STANDOFF AGREEMENT.** Purchaser agrees in connection with any registration of the Company’s securities under the Securities Act or other public offering that, upon the request of the Company or the underwriters managing any registered public offering of the Company’s securities, Purchaser will not sell or otherwise dispose of any Shares without the prior written consent of the Company or such managing underwriters, as the case may be, for a period of time (not to exceed one hundred eighty (180) days) after the effective date of such registration requested by such managing underwriters and subject to all restrictions as the Company or the managing underwriters may specify for employee-stockholders generally. Further, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news, or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the 16-day period beginning on the last day of the restricted period, then, if required by the underwriters or the Company, the restrictions imposed by this Section 4 shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In no event will the restricted period extend beyond two hundred fifteen (215) days after the effective date of the registration statement. For purposes of this Section 4, the term “Company” shall include any wholly-owned subsidiary of the Company into which the Company merges or consolidates. In order to enforce the foregoing covenant, the Company shall have the right to place restrictive legends on the certificates representing the shares subject to this Section and to impose stop transfer instructions with respect to the Shares until the end of such period. Purchaser further agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing and that such underwriters are express third party beneficiaries of this Section 4.

**5. COMPANY’S REFUSAL RIGHT.** Before any Vested Shares held by Purchaser or any transferee of such Vested Shares (either sometimes referred to herein as the “Holder”) may be sold or otherwise transferred (including, without limitation, a transfer by gift or operation of law), the Company and/or its assignee(s) will have a right of first refusal to purchase the Vested Shares to be sold or transferred (the “Offered Shares”) on the terms and conditions set forth in this Section (the “Refusal Right”).

**5.1 Notice of Proposed Transfer.** The Holder of the Offered Shares will deliver to the Company a written notice (the “Notice”) stating: (a) the Holder’s bona fide intention to sell or otherwise transfer the Offered Shares; (b) the name and address of each proposed purchaser or other transferee (the “Proposed Transferee”); (c) the number of Offered Shares to be transferred to each Proposed Transferee; (d) the bona fide cash price or other consideration for which the Holder proposes to transfer the Offered Shares (the “Offered Price”); and (e) that the Holder acknowledges this Notice is an offer to sell the Offered Shares to the Company and/or its assignee(s) pursuant to the Company’s Refusal Right at the Offered Price as provided for in this Exercise Agreement.

**5.2 Exercise of Refusal Right.** At any time within thirty (30) days after the date the Notice is effective pursuant to Section 9.2, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all (or, with the consent of the Holder, less than all) the Offered Shares proposed to be transferred to any one or more of the Proposed Transferees named in the Notice, at the purchase price, determined as specified below.

**5.3 Purchase Price.** The purchase price for the Offered Shares purchased under this Section will be the Offered Price, *provided* that if the Offered Price consists of no legal consideration (as, for example, in the case of a transfer by gift) the purchase price will be the fair market value of the Offered Shares as determined in good faith by the Company's Board of Directors. If the Offered Price includes consideration other than cash, then the value of the non-cash consideration, as determined in good faith by the Company's Board of Directors, will conclusively be deemed to be the cash equivalent value of such non-cash consideration.

**5.4 Payment.** The purchase price for the Offered Shares will be paid, at the option of the Company and/or its assignee(s) (as applicable), by check or by cancellation of all or a portion of any outstanding purchase money indebtedness owed by the Holder to the Company (or to such assignee, in the case of a purchase of Offered Shares by such assignee) or by any combination thereof. The purchase price will be paid without interest within sixty (60) days after the Company's receipt of the Notice, or, at the option of the Company and/or its assignee(s), in the manner and at the time(s) set forth in the Notice.

**5.5 Holder's Right to Transfer.** If all of the Offered Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Offered Shares to each Proposed Transferee at the Offered Price or at a higher price, *provided* that (a) such sale or other transfer is consummated within one hundred twenty (120) days after the date of the Notice, (b) any such sale or other transfer is effected in compliance with all applicable securities laws, and (c) each Proposed Transferee agrees in writing that the provisions of this Section will continue to apply to the Offered Shares in the hands of such Proposed Transferee. If the Offered Shares described in the Notice are not transferred to each Proposed Transferee within such one hundred twenty (120) day period, then a new Notice must be given to the Company pursuant to which the Company will again be offered the Refusal Right before any Shares held by the Holder may be sold or otherwise transferred.

**5.6 Exempt Transfers.** Notwithstanding the foregoing, the following transfers of Vested Shares will be exempt from the Refusal Right: (a) the transfer of any or all of the Vested Shares during Purchaser's lifetime by gift or on Purchaser's death by will or intestacy to Purchaser's "Immediate Family" (as defined below) or to a trust for the benefit of Purchaser or Purchaser's Immediate Family, *provided* that each transferee agrees in a writing satisfactory to the Company that the provisions of this Section will continue to apply to the transferred Vested Shares in the hands of such transferee; (b) any transfer of Vested Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities (except that, subject to Section 5.7, unless the agreement of merger or consolidation expressly otherwise provides, the Refusal Right will continue to apply thereafter to such Vested Shares, in which case the surviving entity of such merger or consolidation shall succeed to the rights of the Company under this Section); or (c) any transfer of Vested Shares pursuant to the winding up and dissolution of the Company. As used herein, the term "**Immediate Family**" will mean Purchaser's spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of the Purchaser or the Purchaser's spouse, the spouse of any of the above, or a person registered with the state of his or her residence as a same-sex domestic partner or a person deemed to be a spousal equivalent for whom the following circumstances are true: (a) irrespective of whether or not the Purchaser and the Spousal Equivalent are the same sex, they are the sole spousal equivalent of the other for the last twelve (12) months, (b) they intend to remain so indefinitely, (c) neither are married to anyone else, (d) both are at least 18 years of age and mentally competent to consent to contract, (e) they are not related by blood to a degree of closeness that which would prohibit legal marriage in the state in which they legally reside, (f) they are jointly responsible for each other's common welfare and financial obligations, and (g) they reside together in the same residence for the last twelve (12) months and intend to do so indefinitely.

**5.7 Termination of Refusal Right.** The Refusal Right will terminate as to all Shares (a) on the effective date of the first sale of Common Stock of the Company to the public pursuant to a registration statement filed with and declared effective by the SEC under the Securities Act or, if expressly approved by the Board as terminating the Refusal Right, under the laws of any other country having substantially the same effect (other than a registration statement relating solely to the issuance of Common Stock pursuant to a business combination or an employee incentive or benefit plan) or (b) on any transfer or conversion of Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities if the common stock of the surviving entity or any direct or indirect parent entity thereof is registered under the Securities Exchange Act of 1934, as amended.

**6. COMPANY'S REPURCHASE OPTION FOR UNVESTED SHARES.** The Company, or its assignee, shall have the option to repurchase all or a portion of the Purchaser's Unvested Shares (as defined in Section 2 of the Stock Option Agreement) on the terms and conditions set forth in this Section (the "**Repurchase Option**") if Purchaser is Terminated (as defined in the Plan) for any reason, or no reason, including without limitation, Purchaser's death, Disability (as defined in the Plan), voluntary resignation or termination by the Company with or without Cause. Notwithstanding the foregoing, the Company shall retain the Repurchase Option for Unvested Shares only as to that number of Unvested Shares (whether or not exercised) that exceeds the number of Vested Shares that remain unexercised.

**6.1 Termination and Termination Date.** In case of any dispute as to whether Purchaser is Terminated, the Committee shall have discretion to determine whether Purchaser has been Terminated and the effective date of such Termination (the "**Termination Date**").

**6.2 Exercise of Repurchase Option.** At any time within ninety (90) days after the Purchaser's Termination Date (or, in the case of securities issued upon exercise of an Option after the Purchaser's Termination Date, within ninety (90) days after the date of such exercise), the Company, or its assignee, may elect to repurchase any or all the Purchaser's Unvested Shares by giving Purchaser written notice of exercise of the Repurchase Option, specifying the number of Unvested Shares to be repurchased. Such Unvested Shares shall be repurchased at the lower of fair market value, as determined by the Board, or Purchaser's Exercise Price, proportionately adjusted for any stock split or similar change in the capital structure of the Company as set forth in Section 2.2 of the Plan (the "**Repurchase Price**"). The Repurchase Price shall be payable, at the option of the Company or its assignee, by check or by cancellation of all or a portion of any outstanding purchase money indebtedness owed by Purchaser to the Company and/or such assignee, or by any combination thereof. The Repurchase Price shall be paid without interest within the term of the Repurchase Option as described in the first sentence of this Section 6.2.

**6.3 Right of Termination Unaffected.** Nothing in this Exercise Agreement shall be construed to limit or otherwise affect in any manner whatsoever the right or power of the Company (or any Parent or Subsidiary of the Company) to terminate Purchaser's employment or other relationship with Company (or the Parent or Subsidiary of the Company) at any time, for any reason or no reason, with or without Cause.

## **7. ADDITIONAL RESTRICTIONS UPON SHARE OWNERSHIP OR TRANSFER.**

**7.1 Rights as a Stockholder.** Subject to the terms and conditions of this Exercise Agreement, Purchaser will have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that Shares are issued to Purchaser until such time as Purchaser disposes of the Shares or the Company and/or its assignee(s) exercise(s) the Refusal Right or the Repurchase Option. Upon an exercise of the Refusal Right or the Repurchase Option, Purchaser will have no further rights as

a holder of the Shares so purchased upon such exercise, other than the right to receive payment for the Shares so purchased in accordance with the provisions of this Exercise Agreement, and Purchaser will promptly surrender the stock certificate(s) evidencing the Shares so purchased to the Company for transfer or cancellation.

**7.2 Escrow.** As security for Purchaser's faithful performance of this Exercise Agreement, Purchaser agrees, immediately upon receipt of the stock certificate(s) evidencing the Shares, to deliver such certificate(s), together with the Stock Powers executed by Purchaser and by Purchaser's spouse, if any (with the date, name of transferee, stock certificate number and number of Shares left blank), to the Secretary of the Company or other designee of the Company (the "**Escrow Holder**"), who is hereby appointed to hold such certificate(s) and Stock Powers in escrow and to take all such actions and to effectuate all such transfers and/or releases of such Shares as are in accordance with the terms of this Exercise Agreement. Purchaser and the Company agree that Escrow Holder will not be liable to any party to this Exercise Agreement (or to any other person or entity) for any actions or omissions unless Escrow Holder is grossly negligent or intentionally fraudulent in carrying out the duties of Escrow Holder under this Exercise Agreement. Escrow Holder may rely upon any letter, notice or other document executed with any signature purported to be genuine and may rely on the advice of counsel and obey any order of any court with respect to the transactions contemplated by this Exercise Agreement. The Shares will be released from escrow upon termination of both the Refusal Right and the Repurchase Option.

**7.3 Encumbrances on Option or Shares.** Purchaser may not grant a lien or security interest in, or pledge, hypothecate or encumber, any Unvested Shares. Purchaser may grant a lien or security interest in, or pledge, hypothecate or encumber Vested Shares only if each party to whom such lien or security interest is granted, or to whom such pledge, hypothecation or other encumbrance is made, agrees in a writing satisfactory to the Company that: (a) such lien, security interest, pledge, hypothecation or encumbrance will not apply to such Vested Shares after they are acquired by the Company and/or its assignees under this Section; and (b) the provisions of this Section will continue to apply to such Vested Shares in the hands of such party and any transferee of such party.

**7.4 Restrictions on Transfers.** Unvested Shares may not be sold or otherwise transferred by Purchaser without the Company's prior written consent. Purchaser hereby agrees that Purchaser shall make no disposition of the Shares (other than as permitted by this Exercise Agreement) unless and until:

- (a) Purchaser shall have notified the Company of the proposed disposition and provided a written summary of the terms and conditions of the proposed disposition;
- (b) Purchaser shall have complied with all requirements of this Exercise Agreement applicable to the disposition of the Shares, including but not limited to the Refusal Right, the Market Standoff and the Repurchase Option; and
- (c) Purchaser shall have provided the Company with written assurances, in form and substance satisfactory to counsel for the Company, that (i) the proposed disposition does not require registration of the Shares under the Securities Act or under any state securities laws, and (ii) all appropriate actions necessary for compliance with the registration and qualification requirements of the Securities Act and any state securities laws, or of any exemption from registration or qualification, available thereunder (including Rule 144) have been taken.

Each person (other than the Company) to whom the Shares are transferred by means of one of the permitted transfers specified in this Exercise Agreement must, as a condition precedent to the validity of such transfer, acknowledge in writing to the Company that such person is bound by the provisions of this

Exercise Agreement and that the transferred Shares are subject to the Company's Refusal Right or the Repurchase Option granted hereunder and the market stand-off provisions of Section 4 hereof, to the same extent such Shares would be so subject if retained by the Purchaser.

**7.5 Restrictive Legends and Stop-transfer Orders.** Purchaser understands and agrees that the Company will place the legends set forth below or similar legends on any stock certificate(s) evidencing the Shares, together with any other legends that may be required by applicable laws, the Company's Certificate of Incorporation or Bylaws, any other agreement between Purchaser and the Company or any agreement between Purchaser and any third party:

*THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT' AND APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.*

*THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON PUBLIC RESALE AND TRANSFER, INCLUDING THE RIGHT OF FIRST REFUSAL AND THE REPURCHASE OPTION HELD BY THE ISSUER AND/OR ITS ASSIGNEE(S), AND A MARKET STANDOFF AGREEMENT, AS SET FORTH IN A STOCK OPTION EXERCISE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH PUBLIC SALE AND TRANSFER RESTRICTIONS INCLUDING THE RIGHT OF FIRST REFUSAL, THE REPURCHASE RIGHT AND THE MARKET STANDOFF ARE BINDING ON TRANSFEREES OF THESE SHARES.*

Purchaser agrees that, to ensure compliance with the restrictions imposed by this Exercise Agreement, the Company may issue appropriate "stop-transfer" instructions to its transfer agent, if any, and if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records. The Company will not be required (a) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Agreement or (b) to treat as owner of such Shares, or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares have been so transferred.

**8. TAX CONSEQUENCES.** PURCHASER UNDERSTANDS THAT PURCHASER MAY SUFFER ADVERSE TAX CONSEQUENCES AS A RESULT OF PURCHASER'S PURCHASE OR DISPOSITION OF THE SHARES. PURCHASER REPRESENTS THAT: (a) PURCHASER HAS CONSULTED WITH ANY TAX ADVISER WHO PURCHASER DEEMS ADVISABLE IN CONNECTION WITH THE PURCHASE OR DISPOSITION OF THE SHARES AND (b) PURCHASER IS NOT RELYING ON THE COMPANY FOR ANY TAX ADVICE. Set forth below is a brief summary as of the date the Plan was adopted by the Board of some of the U.S. Federal and California tax consequences of exercise of the Option and disposition of the Shares. *THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE*

**8.1 Exercise of Incentive Stock Option.** If the Option qualifies as an ISO, there will be no regular U.S. Federal income tax liability or California income tax liability upon the exercise of the Option, although the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price will be treated as a tax preference item for U.S. Federal alternative minimum tax purposes and may subject Purchaser to the alternative minimum tax in the year of exercise.

**8.2 Exercise of Nonqualified Stock Option.** If the Option does not qualify as an ISO, there may be a regular U.S. Federal income tax liability and a California income tax liability upon the exercise of the Option. Purchaser will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price. If Purchaser is a current or former employee of the Company, the Company may be required to withhold from Purchaser's compensation or collect from Purchaser and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income at the time of exercise.

**8.3 Disposition of Shares.** The following tax consequences may apply upon disposition of the Shares.

**8.3.1 Incentive Stock Options.** If the Shares are held for more than twelve (12) months after the date of the transfer of the Shares pursuant to the exercise of an ISO and are disposed of more than two (2) years after the Date of Grant, any gain realized on disposition of the Shares will be treated as long term capital gain for U.S. Federal and California income tax purposes. If Vested Shares purchased under an ISO are disposed of within the applicable one (1) year or two (2) year period, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates in the year of the disposition) to the extent of the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price. To the extent the Shares were exercised prior to vesting coincident with the filing of an 83(b) Election described in Section 8.5, the amount taxed because of a disqualifying disposition will be based upon the excess, if any, of the fair market value on the date of vesting over the exercise price.

**8.3.2 Nonqualified Stock Options.** If the Shares are held for more than twelve (12) months after the date of the transfer of the Shares pursuant to the exercise of an NQSO, any gain realized on disposition of the Shares will be treated as long term capital gain.

**8.3.3 Withholding.** The Company may be required to withhold from the Purchaser's compensation or collect from the Purchaser and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income.

**8.3.4 Notice of Disqualifying Disposition of ISO Shares.** If the Option is an ISO, and if Purchaser sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (a) the date two (2) years after the Date of Grant, and (b) the date one (1) year after transfer of such Shares to Purchaser upon exercise of the Option, Purchaser shall immediately notify the Company in writing of such disposition. Purchaser agrees that Purchaser may be subject to income tax withholding by the Company on the compensation income recognized by Purchaser from the early disposition by payment in cash or out of the current wages or other compensation payable to Purchaser.

**8.3.5 Section 83(b) Election for Unvested Shares.** With respect to Unvested Shares that are subject to the Repurchase Option, unless an election is filed by the Purchaser with the Internal Revenue Service (and, if necessary, the proper state taxing authorities), within 30 days after the purchase of the Unvested Shares electing, pursuant to Section 83(b) of the Code (and similar state tax provisions, if applicable), to be taxed currently on any difference between the Exercise Price of the Unvested Shares and their Fair Market Value on the date of purchase, there may be a recognition of taxable income (including, where applicable, alternative minimum taxable income) to the Purchaser, measured by the excess, if any, of the Fair Market Value of the Unvested Shares at the time they cease to be Unvested Shares, over the Exercise Price of the Unvested Shares. If Purchaser desires to file such an election, a form of 83(b) election is attached to this Exercise Agreement as Exhibit 4. *BY PROVIDING THE FORM OF ELECTION, THE COMPANY DOES NOT THEREBY UNDERTAKE TO FILE THE ELECTION FOR PURCHASER, WHICH OBLIGATION TO FILE SHALL REMAIN SOLELY WITH PURCHASER.*



## **9. GENERAL PROVISIONS.**

**9.1 Successors and Assigns.** The Company may assign any of its rights under this Exercise Agreement, including its rights to purchase Shares under the Refusal Right or the Repurchase Option. Neither Purchaser, nor any of Purchaser's successors and assigns, may assign, whether voluntarily or by operation of law, any of its rights and obligations under this Exercise Agreement, except with the prior written consent of the Company. This Exercise Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Agreement will be binding upon Purchaser and Purchaser's heirs, executors, administrators, legal representatives, successors and assigns.

**9.2 Notices.** Any and all notices required or permitted to be given to a party pursuant to the provisions of this Exercise Agreement will be in writing and will be effective and deemed to provide such party sufficient notice under this Exercise Agreement on the earliest of the following: (a) at the time of personal delivery, if delivery is in person; (b) at the time of transmission by facsimile, addressed to the other party at its facsimile number specified herein (or hereafter modified by subsequent notice to the parties hereto), with confirmation of receipt made by both telephone and printed confirmation sheet verifying successful transmission of the facsimile; (c) one (1) business day after deposit with an express overnight courier for United States deliveries, or two (2) business days after such deposit for deliveries outside of the United States, with proof of delivery from the courier requested; or (d) three (3) business days after deposit in the United States mail by certified mail (return receipt requested) for United States deliveries. All notices for delivery outside the United States will be sent by facsimile or by express courier. All notices not delivered personally or by facsimile will be sent with postage and/or other charges prepaid and properly addressed to the party to be notified at the address or facsimile number set forth below the signature lines of this Exercise Agreement, or at such other address or facsimile number as such other party may designate by one of the indicated means of notice herein to the other parties hereto. Notices to the Company will be marked "Attention: President."

**9.3 Further Assurances.** The parties agree to execute such further documents and instruments and to take such further actions as may be reasonably necessary to carry out the purposes and intent of this Exercise Agreement.

**9.4 Entire Agreement.** The Plan, the Stock Option Agreement and this Exercise Agreement, together with all Exhibits thereto, constitute the entire agreement and understanding of the parties with respect to the subject matter of this Exercise Agreement, and supersede all prior understandings and agreements, whether oral or written, between or among the parties hereto with respect to the specific subject matter hereof.

**9.5 Severability.** If any provision of this Exercise Agreement is determined by any court or arbitrator of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such provision will be enforced to the maximum extent possible given the intent of the parties hereto. If such clause or provision cannot be so enforced, such provision shall be stricken from this Exercise Agreement and the remainder of this Exercise Agreement shall be enforced as if such invalid, illegal or unenforceable clause or provision had (to the extent not enforceable) never been contained in this Exercise Agreement. Notwithstanding the forgoing, if the value of this Exercise Agreement based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS EXERCISE AGREEMENT, IF NOT YET QUALIFIED WITH THE CALIFORNIA COMMISSIONER OF CORPORATIONS AND NOT EXEMPT FROM SUCH QUALIFICATION, IS SUBJECT TO SUCH QUALIFICATION, AND THE ISSUANCE OF SUCH SECURITIES, AND THE RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL UNLESS THE SALE IS EXEMPT. THE RIGHTS OF THE PARTIES TO THIS EXERCISE AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED OR AN EXEMPTION BEING AVAILABLE.

IN WITNESS WHEREOF, the Company has caused this Stock Option Exercise Agreement to be executed by its duly authorized representative, and Purchaser has executed this Stock Option Exercise Agreement, as of the date first set forth above.

**G-ZERO THERAPEUTICS, INC.**

By: \_\_\_\_\_

\_\_\_\_\_  
(Please print name and title)

Address: \_\_\_\_\_

Fax No.: \_\_\_\_\_

**PURCHASER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please print name)

Address: \_\_\_\_\_

Fax No. \_\_\_\_\_

**List of Exhibits**

- Exhibit 1: Stock Power and Assignment Separate from Stock Certificate
- Exhibit 2: Spouse Consent
- Exhibit 3: Copy of Purchaser's Check
- Exhibit 4: Form of Election Pursuant to Section 83(b)

**EXHIBIT 1**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

FOR VALUE RECEIVED and pursuant to that certain Stock Option Exercise Agreement dated as of \_\_\_\_\_, \_\_\_\_\_, (the "**Agreement**"), the undersigned hereby sells, assigns and transfers unto \_\_\_\_\_, \_\_\_\_\_ shares of the Common Stock \$0.0001 par value per share, of G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), standing in the undersigned's name on the books of the Company represented by Certificate No(s). delivered herewith, and does hereby irrevocably constitute and appoint the Secretary of the Company as the undersigned's attorney-in-fact, with full power of substitution, to transfer said stock on the books of the Company. **THIS ASSIGNMENT MAY ONLY BE USED AS AUTHORIZED BY THE AGREEMENT AND ANY EXHIBITS THERETO.**

Dated: \_\_\_\_\_, \_\_\_\_\_,

**PURCHASER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please Print Name)

\_\_\_\_\_  
(Spouse's Signature, if any)

\_\_\_\_\_  
(Please Print Spouse's Name)

**Instructions to Purchaser:** Please do not fill in any blanks other than the signature line. The purpose of this Stock Power and Assignment is to enable the Company to acquire the shares and to exercise its "Refusal Right" or "Repurchase Option" set forth in the Agreement without requiring additional signatures on the part of the Purchaser or Purchaser's Spouse, if any.

**EXHIBIT 2**

**SPOUSE CONSENT**

**SPOUSE CONSENT**

The undersigned spouse of \_\_\_\_\_ (the "**Purchaser**") has read, understands, and hereby approves the Stock Option Exercise Agreement (the "**Agreement**") between Purchaser and G-Zero Therapeutics, Inc. (the "**Company**"). In consideration of the Company granting my spouse the right to purchase the Shares as set forth in the Agreement, the undersigned hereby agrees to be irrevocably bound by the Agreement and further agrees that any community property interest I may have in the Shares shall similarly be bound by the Agreement. The undersigned hereby appoints Purchaser as my attorney-in-fact with respect to any amendment or exercise of any rights under the Agreement.

Date: \_\_\_\_\_

\_\_\_\_\_  
Print Name of Purchaser's Spouse

\_\_\_\_\_  
Signature of Purchaser's Spouse

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Check this box, if Purchaser is not married.**

\_\_\_\_\_  
Signature of Purchaser

**EXHIBIT 3**

**COPY OF PURCHASER'S CHECK**



**EXHIBIT 4**

**FORM OF SECTION 83(B) ELECTION**

**ELECTION UNDER SECTION 83(b)  
OF THE INTERNAL REVENUE CODE**

The undersigned Taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended, to include the excess, if any, of the fair market value of the property described below at the time of transfer over the amount paid for such property, as compensation for services in the calculation of: (a) regular gross income; (b) alternative minimum taxable income or (c) disqualifying disposition gross income, as the case may be.

1. TAXPAYER'S NAME: \_\_\_\_\_  
TAXPAYER'S ADDRESS: \_\_\_\_\_  
SOCIAL SECURITY NUMBER: \_\_\_\_\_
2. The property with respect to which the election is made is described as follows: \_\_\_\_\_ shares of Common Stock of G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**") which were transferred upon exercise of an option by Company, which is Taxpayer's employer or the corporation for whom the Taxpayer performs services.
3. The date on which the shares were transferred pursuant to the exercise of the option was \_\_\_\_\_, and this election is made for calendar year \_\_\_\_\_.
4. The shares received upon exercise of the option are subject to the following restrictions: The Company may repurchase all or a portion of the shares at the Taxpayer's original purchase price under certain conditions at the time of Taxpayer's termination of employment or services.
5. The fair market value of the shares (without regard to restrictions other than restrictions which by their terms will never lapse) was \$ \_\_\_\_\_ per share at the time of exercise of the option.
6. The amount paid for such shares upon exercise of the option was \$ \_\_\_\_\_ per share.
7. The Taxpayer has submitted a copy of this statement to the Company.

*THIS ELECTION MUST BE FILED WITH THE INTERNAL REVENUE SERVICE ("IRS"), AT THE OFFICE WHERE THE TAXPAYER FILES ANNUAL INCOME TAX RETURNS, WITHIN 30 DAYS AFTER THE DATE OF TRANSFER OF THE SHARES, AND MUST ALSO BE FILED WITH THE TAXPAYER'S INCOME TAX RETURNS FOR THE CALENDAR YEAR. THE ELECTION CANNOT BE REVOKED WITHOUT THE CONSENT OF THE IRS.*

Dated: \_\_\_\_\_  
Taxpayer's Signature \_\_\_\_\_



G-ZERO THERAPEUTICS, INC.

2011 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

(Option Vests)

This Stock Option Agreement (the "**Agreement**") is made and entered into as of the date of grant set forth below (the "**Date of Grant**") by and between G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the participant named below (the "**Participant**"). Capitalized terms not defined herein shall have the meaning ascribed to them in the Company's Equity Incentive Plan (the "**Plan**").

<u>Participant's Name</u>	<u>Option Shares</u>	<u>Exercise Price Per Share</u>	<u>Date of Grant</u>	<u>First Vesting Date</u>	<u>Expiration Date</u>
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**Classification of Participant** [ ] Exempt Employee OR [ ] Nonexempt Employee OR [ ] Non-employee

**Type of Stock Option:** [ ] Incentive Stock Option OR [ ] Nonqualified Stock Option

**Securities Law Exemptions to Apply:** \_\_\_\_\_

**1. GRANT OF OPTION.** The Company hereby grants to Participant an option (this "**Option**") to purchase the total number of shares of Common Stock, \$0.00001 par value per share, of the Company set forth above as Total Option Shares (the "**Shares**") at the Exercise Price Per Share set forth above (the "**Exercise Price**"), subject to all of the terms and conditions of this Agreement and the Plan. If designated as an Incentive Stock Option above, the Option is intended to qualify as an "incentive stock option" within the meaning of Section 422 of the Code, except that if on the Date of Grant the Participant is not subject to U.S. income tax, then this Option shall be a NQSO. This Option is not transferable.

**2. EXERCISE PERIOD.** Only Vested Shares may be purchased pursuant to this Exercise Agreement. Shares that are vested pursuant to the schedule set forth in this Section 2 are "**Vested Shares**." Shares that are not vested pursuant to such schedule are "**Unvested Shares**." On the Date of Grant \_\_\_\_\_ of the Shares will be Unvested Shares (the "**Initial Unvested Shares**"). Provided Participant continues to provide services to the Company or any Subsidiary or Parent of the Company at all times from the Date of Grant until the First Vesting Date set forth above, then on the First Vesting Date one-fourth (1/4<sup>th</sup>) of the Initial Unvested Shares will become Vested Shares, and on the same day of each succeeding calendar month thereafter (or if there is no such day in any month, then the last day of such calendar month), an additional one forty-eighth 1/48<sup>th</sup> of the Initial Unvested Shares shall vest and become exercisable until (a) all of the Shares are vested, (b) the Termination Date or (c) vesting otherwise terminates pursuant to this Agreement or the Plan. If application of the vesting schedule above causes a fractional share, such share shall be rounded down to the nearest whole share for each month except for the last month in such vesting period, at the end of which last month this Option shall become vested for the full remainder of the Shares. The Option shall expire on the Expiration Date set forth above or earlier as provided in Section 4 below in accordance with Section 4.6 of the Plan.

**3. MANNER OF EXERCISE.** To exercise this Option, Participant (or in the case of exercise after Participant's death or incapacity, Participant's executor, administrator, heir or legatee, as

the case may be) must deliver to the Company an executed stock option exercise agreement in the form attached hereto as Exhibit A, or in such other form as may be approved by the Committee from time to time (the "**Exercise Agreement**"). If someone other than Participant exercises the Option, then such person must submit documentation reasonably acceptable to the Company verifying that such person has the legal right to exercise the Option and such person shall be subject to all of the restrictions contained herein as if such person were the Participant. The Option may not be exercised unless such exercise is in compliance with all applicable securities laws, as they are in effect on the date of exercise. The Option may not be exercised as to fewer than one hundred (100) Shares unless it is exercised as to all Shares as to which the Option is then exercisable.

#### **4. TERMINATION.**

**4.1 Termination for Any Reason Except Death, Disability or Cause.** If Participant is Terminated for any reason, except death, Disability or for Cause, the Option, to the extent (and only to the extent) that it would have been exercisable by Participant on the Termination Date, may be exercised by Participant no later than three (3) months after the Termination Date, but in any event no later than the Expiration Date.

**4.2 Termination Because of Death or Disability.** If Participant is Terminated because of Participant's death or Disability (or Participant dies within three (3) months after Termination when Termination is for any reason other than Participant's Disability or for Cause), the Option, to the extent that it is exercisable by Participant on the Termination Date, may be exercised by Participant (or Participant's legal representative) no later than twelve (12) months after the Termination Date, but in any event no later than the Expiration Date. Any exercise beyond (a) three (3) months after the Termination Date when the Termination is for any reason other than the Participant's death or disability, within the meaning of Section 22(e)(3) of the Code; or (b) twelve (12) months after the Termination Date when the termination is for Participant's disability, within the meaning of Section 22(e)(3) of the Code, will be deemed to be the exercise of an NQSO.

**4.3 Termination for Cause.** If the Participant is terminated for Cause, Participant's Options shall expire on the Termination Date, or at such later time and on such conditions as are determined by the Committee.

**5. COMPLIANCE WITH LAWS AND REGULATIONS.** The Plan, this Agreement and the Exercise Agreement are intended to comply with Section 25102(o) and any regulations relating thereto. Any provision of this Agreement or the Exercise Agreement that is inconsistent with Section 25102(o) or any regulations relating thereto shall, without further act or amendment by the Company or the Board, be reformed to comply therewith.

**6. ENTIRE AGREEMENT.** The Plan is incorporated herein by reference. This Agreement, the Exercise Agreement and the Plan constitute the entire agreement of the parties and supersede all prior undertakings and agreements with respect to the subject matter hereof.

**7. ACCEPTANCE.** Participant hereby acknowledges receipt of a copy of the Plan, this Agreement and the Exercise Agreement. Participant has read and understands the terms and provisions thereof, and accepts the Option subject to all the terms and conditions of therein. The Exercise Price has been determined by the Committee based upon the best evidence available to the Committee and is intended to equal the Fair Market Value of the Shares as of the date of grant, or in some cases 110% of Fair Market Value, as required by the Code. However, the tax treatment of this Option is not guaranteed. Neither the Company, the Committee nor any of their designees shall be liable for any taxes, penalties or other monetary amounts owed by any Participant, employee, beneficiary or other person as a result of the

grant, amendment, modification, exercise and/or payment of, or under, any Award, notwithstanding any challenge made to the determination of Fair Market Value by any taxing authority. By accepting this Option, Participant acknowledges and agrees to the foregoing. Participant acknowledges that there may be adverse tax consequences upon exercise of the Option or disposition of the Shares and that Participant should consult a tax adviser prior to such exercise or disposition.

**8. EXECUTION.** This Agreement and the Exercise Agreement may be entered into in two or more counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement. This Agreement and the Exercise Agreement may be executed and delivered by facsimile and, upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

**IN WITNESS WHEREOF**, the Company has caused this Stock Option Agreement to be executed by its duly authorized representative and Participant has executed this Stock Option Agreement, effective as of the Date of Grant.

**G-ZERO THERAPEUTICS, INC.**

**PARTICIPANT**

By: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please print name and title)

\_\_\_\_\_  
(Please print name)

Exhibit A

**FORM OF STOCK OPTION EXERCISE AGREEMENT**

G-ZERO THERAPEUTICS, INC.

2011 EQUITY INCENTIVE PLAN

STOCK OPTION EXERCISE AGREEMENT  
(Option Vests)

This Stock Option Exercise Agreement (the "**Exercise Agreement**") is made and entered into as of \_\_\_\_\_, \_\_\_\_\_ by and between G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the purchaser named below (the "**Purchaser**"). Capitalized terms not defined herein shall have the meanings ascribed to them in the Company's 2011 Equity Incentive Plan (the "**Plan**").

<u>Name of Purchaser</u>	<u>Social Security Number:</u>	<u>Total Number of Shares:</u>	<u>Exercise Price Per Share:</u>	<u>Option No. or Date of Grant:</u>	<u>ISO or NQSO</u>
			\$		

**1. EXERCISE OF OPTION.**

**1.1 Agreement to Exercise.** Pursuant to exercise of that certain option (the "**Option**") granted to Purchaser under the Plan and subject to the terms and conditions of this Exercise Agreement, Purchaser hereby purchases from the Company, and the Company hereby sells to Purchaser, the Total Number of Shares set forth above (the "**Shares**") of the Company's Common Stock, \$0.00001 par value per share, at the Exercise Price Per Share set forth above (the "**Exercise Price**"). As used in this Exercise Agreement, the term "**Shares**" refers to the Shares purchased under this Exercise Agreement and includes all securities received (a) in replacement of the Shares, (b) as a result of stock dividends or stock splits with respect to the Shares, and (c) all securities received in replacement of the Shares in a merger, recapitalization, reorganization or similar corporate transaction.

**1.2 Payment.** Purchaser hereby delivers payment of the Exercise Price in the manner permitted in the Plan as follows (check and complete as appropriate):

- in cash (by check) in the amount of \$ \_\_\_\_\_, receipt of which is acknowledged by the Company.
- by cancellation of indebtedness of the Company currently owed to Purchaser in the amount of \$ \_\_\_\_\_.
- by the waiver hereby of compensation due or accrued for services previously rendered to the Company in the amount of \$ \_\_\_\_\_.
- provided that a public market for the Company's stock exists and subject to compliance with applicable law and solely in the discretion of the Committee: (a) through a "same day sale" commitment from Purchaser and broker-dealer whereby Purchaser irrevocably elects to exercise the Option and to sell a portion of the Shares so purchased sufficient to pay for the total Exercise Price and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price directly to the Company, or (b) through a "margin" commitment from Purchaser and a broker-dealer whereby Purchaser irrevocably elects to exercise the Option and to



pledge the Shares so purchased to the Dealer in a margin account as security for a loan from the broker-dealer in the amount of the total Exercise Price, and whereby the broker-dealer irrevocably commits upon receipt of such Shares to forward the total Exercise Price directly to the Company.

[ ] by delivery of fully-paid, nonassessable and vested shares of the Common Stock of the Company owned by Purchaser free and clear of all liens, claims, encumbrances or security interests, valued at the current Fair Market Value of \$ per share (a) for which the Company has received “full payment of the purchase price” within the meaning of SEC Rule 144, (if purchased by use of a promissory note, such note has been fully paid with respect to such vested shares), or (b) that were obtained by Purchaser in the open public market.

## **2. DELIVERY.**

**2.1 Documents and Payment to be Delivered.** Purchaser hereby delivers to the Company at its principal executive offices, Attn: President: (a) this completed and signed Exercise Agreement, (b) two (2) copies of a blank Stock Power and Assignment Separate from Stock Certificate in the form of Exhibit 1 attached hereto (the “**Stock Powers**”), both executed by Purchaser and Purchaser’s spouse, if any, (c) if Purchaser is married, a Consent of Spouse in the form of Exhibit 2 attached hereto (the “**Spouse Consent**”) executed by Purchaser’s spouse, and (d) the Exercise Price and payment or other provision for any applicable tax obligations (if paid by check, a copy of such check shall be attached hereto as Exhibit 3). Upon its receipt of the Exercise Price, payment or other provision for any applicable tax obligations and all the documents to be executed and delivered by Purchaser to the Company, the Company will issue a duly executed stock certificate evidencing the Shares in the name of Purchaser, or, if applicable, Purchaser’s estate, to be placed in escrow as provided in Section 6.2 until expiration or termination of the Company’s Refusal Right described in Section 5.

**2.2 Tax Withholding.** Prior to the issuance of the Shares upon exercise of the Option, Purchaser must pay or provide for any applicable federal, state and local withholding obligations of the Company. If the Committee permits, Purchaser may provide for payment of withholding taxes upon exercise of the Option by requesting that the Company retain the minimum number of Shares with a Fair Market Value equal to the minimum amount of taxes required to be withheld; but in no event will the Company withhold Shares if such withholding would result in adverse accounting consequences to the Company. In such case, the Company shall issue the net number of Shares to the Purchaser by deducting the Shares retained from the Shares issuable upon exercise.

## **3. REPRESENTATIONS AND WARRANTIES OF PURCHASER.** Purchaser represents and warrants to the Company as follows.

**3.1 Agrees to Terms of the Plan.** Purchaser has received a copy of the Plan and the Stock Option Agreement, has read and understands the terms of the Plan, the Stock Option Agreement and this Exercise Agreement, and agrees to be bound by their terms and conditions. Purchaser acknowledges that there may be adverse tax consequences upon exercise of the Option or disposition of the Shares, and that Purchaser should consult a tax adviser prior to such exercise or disposition.

**3.2 Shares Not Registered or Qualified.** Purchaser understands and acknowledges that the Shares have not been registered with the SEC under the Securities Act, or with any securities regulatory agency administering any state securities laws, and that, notwithstanding any other provision of the Stock Option Agreement to the contrary, the exercise of any rights to purchase any Shares is expressly conditioned upon compliance with the Securities Act and all applicable state securities laws. Purchaser agrees to cooperate with the Company to ensure compliance with such laws.

**3.3 No Transfer Unless Registered or Exempt.** Purchaser understands that Purchaser may not transfer any Shares unless such Shares are registered under the Securities Act or qualified under applicable state securities laws or unless, in the opinion of counsel to the Company, exemptions from such registration and qualification requirements are available. Purchaser understands that only the Company may file a registration statement with the SEC and that the Company is under no obligation to do so with respect to the Shares. Purchaser has also been advised that exemptions from registration and qualification may not be available or may not permit Purchaser to transfer all or any of the Shares in the amounts or at the times proposed by Purchaser.

**3.4 SEC Rule 701.** Shares that are issued pursuant to SEC Rule 701 promulgated under the Securities Act and may become freely tradable by non-affiliates (under limited conditions regarding the method of sale) ninety (90) days after the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the SEC, subject to the lengthier market standoff agreement contained in Section 4 of this Exercise Agreement or any other agreement entered into by Purchaser. Affiliates must comply with the provisions (other than the holding period requirements) of Rule 144 which permits certain limited sales of unregistered securities. Rule 144 is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an "affiliate" of the Company or if "current public information" about the Company (as defined in Rule 144) is not publicly available.

**3.5 Access to Information.** Purchaser has had access to all information regarding the Company and its present and prospective business, assets, liabilities and financial condition that Purchaser reasonably considers important in making the decision to purchase the Shares, and Purchaser has had ample opportunity to ask questions of the Company's representatives concerning such matters and this investment.

**3.6 Understanding of Risks.** Purchaser is fully aware of: (a) the highly speculative nature of the investment in the Shares; (b) the financial hazards involved; (c) the lack of liquidity of the Shares and the restrictions on transferability of the Shares (e.g., that Purchaser may not be able to sell or dispose of the Shares or use them as collateral for loans); (d) the qualifications and backgrounds of the management of the Company; and (e) the tax consequences of investment in the Shares.

**3.7 Purchase for Own Account for Investment.** Purchaser is purchasing the Shares for Purchaser's own account for investment purposes only and not with a view to, or for sale in connection with, a distribution of the Shares within the meaning of the Securities Act. Purchaser has no present intention of selling or otherwise disposing of all or any portion of the Shares and no one other than Purchaser has any beneficial ownership of any of the Shares.

**3.8 No General Solicitation.** At no time was Purchaser presented with or solicited by any publicly issued or circulated newspaper, mail, radio, television or other form of general advertising or solicitation in connection with the offer, sale and purchase of the Shares.

**3.9 SEC Rule 144.** In addition, Purchaser has been advised that SEC Rule 144 promulgated under the Securities Act, which permits certain limited sales of unregistered securities, is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that use of a promissory note as payment for the Shares may not be deemed to be "full payment of the purchase price" within the meaning of Rule 144 unless certain conditions are met and that, accordingly, the Rule 144 holding period of such Shares may

not begin to run until such Shares are fully paid for within the meaning of Rule 144. Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an “affiliate” of the Company or if “current public information” about the Company (as defined in Rule 144) is not publicly available.

**4. MARKET STANDOFF AGREEMENT.** Purchaser agrees in connection with any registration of the Company’s securities under the Securities Act or other public offering that, upon the request of the Company or the underwriters managing any registered public offering of the Company’s securities, Purchaser will not sell or otherwise dispose of any Shares without the prior written consent of the Company or such managing underwriters, as the case may be, for a period of time (not to exceed one hundred eighty (180) days) after the effective date of such registration requested by such managing underwriters and subject to all restrictions as the Company or the managing underwriters may specify for employee-stockholders generally. Further, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news, or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the 16-day period beginning on the last day of the restricted period, then, if required by the underwriters or the Company, the restrictions imposed by this Section 4 shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In no event will the restricted period extend beyond two hundred fifteen (215) days after the effective date of the registration statement. For purposes of this Section 4, the term “Company” shall include any wholly-owned subsidiary of the Company into which the Company merges or consolidates. In order to enforce the foregoing covenant, the Company shall have the right to place restrictive legends on the certificates representing the shares subject to this Section and to impose stop transfer instructions with respect to the Shares until the end of such period. Purchaser further agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing and that such underwriters are express third party beneficiaries of this Section 4.

**5. COMPANY’S REFUSAL RIGHT.** Before any Shares held by Purchaser or any transferee of such Shares (either sometimes referred to herein as the “**Holder**”) may be sold or otherwise transferred (including, without limitation, a transfer by gift or operation of law), the Company and/or its assignee(s) will have a right of first refusal to purchase the Shares to be sold or transferred (the “**Offered Shares**”) on the terms and conditions set forth in this Section (the “**Refusal Right**”).

**5.1 Notice of Proposed Transfer.** The Holder of the Offered Shares will deliver to the Company a written notice (the “**Notice**”) stating: (a) the Holder’s bona fide intention to sell or otherwise transfer the Offered Shares; (b) the name and address of each proposed purchaser or other transferee (the “**Proposed Transferee**”); (c) the number of Offered Shares to be transferred to each Proposed Transferee; (d) the bona fide cash price or other consideration for which the Holder proposes to transfer the Offered Shares (the “**Offered Price**”); and (e) that the Holder acknowledges this Notice is an offer to sell the Offered Shares to the Company and/or its assignee(s) pursuant to the Company’s Refusal Right at the Offered Price as provided for in this Exercise Agreement.

**5.2 Exercise of Refusal Right.** At any time within thirty (30) days after the date the Notice is effective pursuant to Section 8.2, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all (or, with the consent of the Holder, less than all) the Offered Shares proposed to be transferred to any one or more of the Proposed Transferees named in the Notice, at the purchase price, determined as specified below.

**5.3 Purchase Price.** The purchase price for the Offered Shares purchased under this Section will be the Offered Price, *provided* that if the Offered Price consists of no legal consideration (as, for example, in the case of a transfer by gift) the purchase price will be the fair market value of the

Offered Shares as determined in good faith by the Company's Board of Directors. If the Offered Price includes consideration other than cash, then the value of the non-cash consideration, as determined in good faith by the Company's Board of Directors, will conclusively be deemed to be the cash equivalent value of such non-cash consideration.

**5.4 Payment.** The purchase price for the Offered Shares will be paid, at the option of the Company and/or its assignee(s) (as applicable), by check or by cancellation of all or a portion of any outstanding purchase money indebtedness owed by the Holder to the Company (or to such assignee, in the case of a purchase of Offered Shares by such assignee) or by any combination thereof. The purchase price will be paid without interest within sixty (60) days after the Company's receipt of the Notice, or, at the option of the Company and/or its assignee(s), in the manner and at the time(s) set forth in the Notice.

**5.5 Holder's Right to Transfer.** If all of the Offered Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Offered Shares to each Proposed Transferee at the Offered Price or at a higher price, *provided* that (a) such sale or other transfer is consummated within one hundred twenty (120) days after the date of the Notice, (b) any such sale or other transfer is effected in compliance with all applicable securities laws, and (c) each Proposed Transferee agrees in writing that the provisions of this Section will continue to apply to the Offered Shares in the hands of such Proposed Transferee. If the Offered Shares described in the Notice are not transferred to each Proposed Transferee within such one hundred twenty (120) day period, then a new Notice must be given to the Company pursuant to which the Company will again be offered the right of first refusal before any Shares held by the Holder may be sold or otherwise transferred.

**5.6 Exempt Transfers.** Notwithstanding the foregoing, the following transfers of Shares will be exempt from the Refusal Right: (a) the transfer of any or all of the Shares during Purchaser's lifetime by gift or on Purchaser's death by will or intestacy to Purchaser's "Immediate Family" (as defined below) or to a trust for the benefit of Purchaser or Purchaser's Immediate Family, *provided* that each transferee agrees in a writing satisfactory to the Company that the provisions of this Section 5 will continue to apply to the transferred Shares in the hands of such transferee; (b) any transfer of Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities (except that, subject to Section 5.7, unless the agreement of merger or consolidation expressly otherwise provides, the Refusal Right will continue to apply thereafter to such Shares, in which case the surviving entity of such merger or consolidation shall succeed to the rights of the Company under this Section 5); or (c) any transfer of Shares pursuant to the winding up and dissolution of the Company. As used herein, the term "**Immediate Family**" will mean Purchaser's spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of the Purchaser or the Purchaser's spouse, the spouse of any of the above, or a person registered with the state of his or her residence as a same-sex domestic partner or a person deemed to be a spousal equivalent for whom the following circumstances are true: (a) irrespective of whether or not the Participant and the Spousal Equivalent are the same sex, they are the sole spousal equivalent of the other for the last twelve (12) months, (b) they intend to remain so indefinitely, (c) neither are married to anyone else, (d) both are at least 18 years of age and mentally competent to consent to contract, (e) they are not related by blood to a degree of closeness that which would prohibit legal marriage in the state in which they legally reside, (f) they are jointly responsible for each other's common welfare and financial obligations, and (g) they reside together in the same residence for the last twelve (12) months and intend to do so indefinitely.

**5.7 Termination of Refusal Right.** The Refusal Right will terminate as to all Shares (a) on the effective date of the first sale of Common Stock of the Company to the public pursuant

to a registration statement filed with and declared effective by the SEC under the Securities Act or, if expressly approved by the Board as terminating the Refusal Right, under the laws of any other country having substantially the same effect (other than a registration statement relating solely to the issuance of Common Stock pursuant to a business combination or an employee incentive or benefit plan) or (b) on any transfer or conversion of Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities if the common stock of the surviving entity or any direct or indirect parent entity thereof is registered under the Securities Exchange Act of 1934, as amended.

## **6. ADDITIONAL RESTRICTIONS UPON SHARE OWNERSHIP OR TRANSFER.**

**6.1 Rights as a Stockholder.** Subject to the terms and conditions of this Exercise Agreement, Purchaser will have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that Shares are issued to Purchaser until such time as Purchaser disposes of the Shares or the Company and/or its assignee(s) exercise(s) the Refusal Right. Upon an exercise of the Refusal Right, Purchaser will have no further rights as a holder of the Shares so purchased upon such exercise, other than the right to receive payment for the Shares so purchased in accordance with the provisions of this Exercise Agreement, and Purchaser will promptly surrender the stock certificate(s) evidencing the Shares so purchased to the Company for transfer or cancellation.

**6.2 Escrow.** As security for Purchaser's faithful performance of this Exercise Agreement, Purchaser agrees, immediately upon receipt of the stock certificate(s) evidencing the Shares, to deliver such certificate(s), together with the Stock Powers executed by Purchaser and by Purchaser's spouse, if any (with the date, name of transferee, stock certificate number and number of Shares left blank), to the Secretary of the Company or other designee of the Company (the "**Escrow Holder**"), who is hereby appointed to hold such certificate(s) and Stock Powers in escrow and to take all such actions and to effectuate all such transfers and/or releases of such Shares as are in accordance with the terms of this Exercise Agreement. Purchaser and the Company agree that Escrow Holder will not be liable to any party to this Exercise Agreement (or to any other person or entity) for any actions or omissions unless Escrow Holder is grossly negligent or intentionally fraudulent in carrying out the duties of Escrow Holder under this Exercise Agreement. Escrow Holder may rely upon any letter, notice or other document executed with any signature purported to be genuine and may rely on the advice of counsel and obey any order of any court with respect to the transactions contemplated by this Exercise Agreement. The Shares will be released from escrow upon termination of the Refusal Right.

**6.3 Encumbrances on Shares.** Purchaser may grant a lien or security interest in, or pledge, hypothecate or encumber Shares only if each party to whom such lien or security interest is granted, or to whom such pledge, hypothecation or other encumbrance is made, agrees in a writing satisfactory to the Company that: (a) such lien, security interest, pledge, hypothecation or encumbrance will not apply to such Shares after they are acquired by the Company and/or its assignees under this Section; and (b) the provisions of this Section will continue to apply to such Shares in the hands of such party and any transferee of such party. Purchaser may not grant a lien or security interest in, or pledge, hypothecate or encumber, any Unvested Shares.

**6.4 Restrictions on Transfers.** Purchaser hereby agrees that Purchaser shall make no disposition of the Shares (other than as permitted by this Exercise Agreement) unless and until:

(a) Purchaser shall have notified the Company of the proposed disposition and provided a written summary of the terms and conditions of the proposed disposition;

(b) Purchaser shall have complied with all requirements of this Exercise Agreement applicable to the disposition of the Shares, including but not limited to the Refusal Right and the Market Standoff; and

(c) Purchaser shall have provided the Company with written assurances, in form and substance satisfactory to counsel for the Company, that (i) the proposed disposition does not require registration of the Shares under the Securities Act or under any state securities laws, and (ii) all appropriate actions necessary for compliance with the registration and qualification requirements of the Securities Act and any state securities laws, or of any exemption from registration or qualification, available thereunder (including Rule 144) have been taken.

Each person (other than the Company) to whom the Shares are transferred by means of one of the permitted transfers specified in this Exercise Agreement must, as a condition precedent to the validity of such transfer, acknowledge in writing to the Company that such person is bound by the provisions of this Exercise Agreement and that the transferred Shares are subject to the Company's Refusal Right granted in Section 5 and the market stand-off provisions of Section 4, to the same extent such Shares would be so subject if retained by the Purchaser.

**6.5 Restrictive Legends and Stop-transfer Orders.** Purchaser understands and agrees that the Company will place the legends set forth below or similar legends on any stock certificate(s) evidencing the Shares, together with any other legends that may be required by applicable laws, the Company's Certificate of Incorporation or Bylaws, any other agreement between Purchaser and the Company or any agreement between Purchaser and any third party:

*THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.*

*THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON PUBLIC RESALE AND TRANSFER, INCLUDING THE REFUSAL RIGHT HELD BY THE ISSUER AND/OR ITS ASSIGNEE(S), AND A MARKET STANDOFF AGREEMENT, AS SET FORTH IN A STOCK OPTION EXERCISE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH PUBLIC SALE AND TRANSFER RESTRICTIONS INCLUDING THE REFUSAL RIGHT AND THE MARKET STANDOFF ARE BINDING ON TRANSFEREES OF THESE SHARES.*

Purchaser agrees that, to ensure compliance with the restrictions imposed by this Exercise Agreement, the Company may issue appropriate "stop-transfer" instructions to its transfer agent, if any, and if the Company transfers its own securities, it may make appropriate notations to the same effect in its own

records. The Company will not be required (a) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Agreement or (b) to treat as owner of such Shares, or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares have been so transferred.

**7. TAX CONSEQUENCES.** PURCHASER UNDERSTANDS THAT PURCHASER MAY SUFFER ADVERSE TAX CONSEQUENCES AS A RESULT OF PURCHASER'S PURCHASE OR DISPOSITION OF THE SHARES. PURCHASER REPRESENTS THAT: (a) PURCHASER HAS CONSULTED WITH ANY TAX ADVISER WHO PURCHASER DEEMS ADVISABLE IN CONNECTION WITH THE PURCHASE OR DISPOSITION OF THE SHARES AND (b) PURCHASER IS NOT RELYING ON THE COMPANY FOR ANY TAX ADVICE. Set forth below is a brief summary as of the date the Plan was adopted by the Board of some of the U.S. Federal and California tax consequences of exercise of the Option and disposition of the Shares. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. PURCHASER SHOULD CONSULT HIS OR HER OWN TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

**7.1 Exercise of Incentive Stock Option.** If the Option qualifies as an ISO, there will be no regular U.S. Federal income tax liability or [California] income tax liability upon the exercise of the Option, although the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price will be treated as a tax preference item for U.S. Federal alternative minimum tax purposes and may subject Purchaser to the alternative minimum tax in the year of exercise.

**7.2 Exercise of Nonqualified Stock Option.** If the Option does not qualify as an ISO, there may be a regular U.S. Federal income tax liability and a California income tax liability upon the exercise of the Option. Purchaser will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price. If Purchaser is a current or former employee of the Company, the Company may be required to withhold from Purchaser's compensation or collect from Purchaser and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income at the time of exercise.

**7.3 Disposition of Shares.** The following tax consequences may apply upon disposition of the Shares.

**7.3.1 Incentive Stock Options.** If the Shares are held for more than twelve (12) months after the date of the transfer of the Shares pursuant to the exercise of an ISO and are disposed of more than two (2) years after the Date of Grant, any gain realized on disposition of the Shares will be treated as long term capital gain for U.S. Federal and California income tax purposes. If Shares purchased under an ISO are disposed of within the applicable one (1) year or two (2) year period, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates in the year of the disposition) to the extent of the excess, if any, of the Fair Market Value of the Shares on the date of exercise over the Exercise Price.

**7.3.2 Nonqualified Stock Options.** If the Shares are held for more than twelve (12) months after the date of the transfer of the Shares pursuant to the exercise of an NQSO, any gain realized on disposition of the Shares will be treated as long term capital gain.

**7.3.3 Withholding.** The Company may be required to withhold from the Purchaser's compensation or collect from the Purchaser and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income.

**7.4 Notice of Disqualifying Disposition of ISO Shares.** If the Option is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (a) the date two (2) years after the Date of Grant, and (b) the date one (1) year after transfer of such Shares to Participant upon exercise of the Option, Participant shall immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant from the early disposition by payment in cash or out of the current wages or other compensation payable to Participant

## **8. GENERAL PROVISIONS.**

**8.1 Successors and Assigns.** The Company may assign any of its rights under this Exercise Agreement, including its rights to purchase Shares under the Refusal Right. Neither Purchaser, nor any of Purchaser's successors and assigns, may assign, whether voluntarily or by operation of law, any of its rights and obligations under this Exercise Agreement, except with the prior written consent of the Company. This Exercise Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Agreement will be binding upon Purchaser and Purchaser's heirs, executors, administrators, legal representatives, successors and assigns.

**8.2 Notices.** Any and all notices required or permitted to be given to a party pursuant to the provisions of this Exercise Agreement will be in writing and will be effective and deemed to provide such party sufficient notice under this Exercise Agreement on the earliest of the following: (a) at the time of personal delivery, if delivery is in person; (b) at the time of transmission by facsimile, addressed to the other party at its facsimile number specified herein (or hereafter modified by subsequent notice to the parties hereto), with confirmation of receipt made by both telephone and printed confirmation sheet verifying successful transmission of the facsimile; (c) one (1) business day after deposit with an express overnight courier for United States deliveries, or two (2) business days after such deposit for deliveries outside of the United States, with proof of delivery from the courier requested; or (d) three (3) business days after deposit in the United States mail by certified mail (return receipt requested) for United States deliveries. All notices for delivery outside the United States will be sent by facsimile or by express courier. All notices not delivered personally or by facsimile will be sent with postage and/or other charges prepaid and properly addressed to the party to be notified at the address or facsimile number set forth below the signature lines of this Exercise Agreement, or at such other address or facsimile number as such other party may designate by one of the indicated means of notice herein to the other parties hereto. Notices to the Company will be marked "Attention: President."

**8.3 Further Assurances.** The parties agree to execute such further documents and instruments and to take such further actions as may be reasonably necessary to carry out the purposes and intent of this Exercise Agreement.

**8.4 Entire Agreement.** The Plan, the Stock Option Agreement and this Exercise Agreement, together with all Exhibits thereto, constitute the entire agreement and understanding of the parties with respect to the subject matter of this Exercise Agreement, and supersede all prior understandings and agreements, whether oral or written, between or among the parties hereto with respect to the specific subject matter hereof.

**8.5 Severability.** If any provision of this Exercise Agreement is determined by any court or arbitrator of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such provision will be enforced to the maximum extent possible given the intent of the parties hereto. If such clause or provision cannot be so enforced, such provision shall be stricken from this Exercise Agreement and the remainder of this Exercise Agreement shall be enforced as if such invalid, illegal or unenforceable



clause or provision had (to the extent not enforceable) never been contained in this Exercise Agreement. Notwithstanding the forgoing, if the value of this Exercise Agreement based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

*THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS EXERCISE AGREEMENT, IF NOT YET QUALIFIED WITH THE CALIFORNIA COMMISSIONER OF CORPORATIONS AND NOT EXEMPT FROM SUCH QUALIFICATION, IS SUBJECT TO SUCH QUALIFICATION, AND THE ISSUANCE OF SUCH SECURITIES, AND THE RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL UNLESS THE SALE IS EXEMPT. THE RIGHTS OF THE PARTIES TO THIS EXERCISE AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED OR AN EXEMPTION BEING AVAILABLE.*

**[SIGNATURE PAGE FOLLOWS]**

IN WITNESS WHEREOF, the Company has caused this Stock Option Exercise Agreement to be executed by its duly authorized representative, and Purchaser has executed this Stock Option Exercise Agreement, as of the date first set forth above.

**G-ZERO THERAPEUTICS, INC.**

By: \_\_\_\_\_

\_\_\_\_\_  
(Please print name and title)

Address: \_\_\_\_\_

Fax No.: \_\_\_\_\_

**PURCHASER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please print name)

Address: \_\_\_\_\_

Fax No. \_\_\_\_\_

**List of Exhibits**

- Exhibit 1: Stock Power and Assignment Separate from Stock Certificate
- Exhibit 2: Spouse Consent
- Exhibit 3: Copy of Purchaser's Check

**EXHIBIT 1**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

FOR VALUE RECEIVED and pursuant to that certain Stock Option Exercise Agreement dated as of \_\_\_\_\_, \_\_\_\_\_, (the "**Agreement**"), the undersigned hereby sells, assigns and transfers unto \_\_\_\_\_, \_\_\_\_\_ shares of the Common Stock \$0.00001 par value per share, of G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), standing in the undersigned's name on the books of the Company represented by Certificate No(s) \_\_\_\_\_ delivered herewith, and does hereby irrevocably constitute and appoint the Secretary of the Company as the undersigned's attorney-in-fact, with full power of substitution, to transfer said stock on the books of the Company. **THIS ASSIGNMENT MAY ONLY BE USED AS AUTHORIZED BY THE AGREEMENT AND ANY EXHIBITS THERETO.**

Dated: \_\_\_\_\_,

**PURCHASER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please Print Name)

\_\_\_\_\_  
(Spouse's Signature, if any)

\_\_\_\_\_  
(Please Print Spouse's Name)

**Instructions to Purchaser:** Please do not fill in any blanks other than the signature line. The purpose of this Stock Power and Assignment is to enable the Company to acquire the shares to exercise its "Refusal Right" set forth in the Exercise Agreement without requiring additional signatures on the part of the Purchaser or Purchaser's Spouse, if any.

**EXHIBIT 2**

**SPOUSE CONSENT**

**SPOUSE CONSENT**

The undersigned spouse of \_\_\_\_\_ (the "**Purchaser**") has read, understands, and hereby approves the Stock Option Exercise Agreement (the "**Agreement**") between Purchaser and G-Zero Therapeutics, Inc. (the "**Company**"). In consideration of the Company granting my spouse the right to purchase the Shares as set forth in the Agreement, the undersigned hereby agrees to be irrevocably bound by the Agreement and further agrees that any community property interest I may have in the Shares shall similarly be bound by the Agreement. The undersigned hereby appoints Purchaser as my attorney-in-fact with respect to any amendment or exercise of any rights under the Agreement.

Date: \_\_\_\_\_

\_\_\_\_\_  
Print Name of Purchaser's Spouse

\_\_\_\_\_  
Signature of Purchaser's Spouse

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Check this box, if Purchaser is not married.**

\_\_\_\_\_  
Signature of Purchaser

**EXHIBIT 3**

**COPY OF PURCHASER'S CHECK**





G-ZERO THERAPEUTICS, INC.

2011 EQUITY INCENTIVE PLAN

RESTRICTED STOCK PURCHASE AGREEMENT

This Restricted Stock Purchase Agreement (the "**Agreement**") is made and entered into as of \_\_\_\_\_, \_\_\_\_\_ (the "**Effective Date**") by and between G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the purchaser named below (the "**Purchaser**"). Capitalized terms not defined herein shall have the meaning ascribed to them in the Company's 2011 Equity Incentive Plan (the "**Plan**").

<u>Name of Purchaser</u>	<u>Social Security Number</u>	<u>Total Number of Shares</u>	<u>Purchase Price Per Share</u>	<u>Total Purchase Price</u>

**1. PURCHASE OF SHARES.**

**1.1 Purchase of Shares.** On the Effective Date and subject to the terms and conditions of this Agreement and the Plan, Purchaser hereby purchases from the Company, and the Company hereby sells to Purchaser, the Total Number of Shares set forth above (the "**Shares**") of the Company's Common Stock, \$0.0001 par value per share, at the Purchase Price Per Share as set forth above (the "**Purchase Price Per Share**") for a Total Purchase Price as set forth above (the "**Purchase Price**"). As used in this Agreement, the term "**Shares**" includes the Shares purchased under this Agreement and all securities received (a) in replacement of the Shares, (b) as a result of stock dividends or stock splits with respect to the Shares, and (c) in replacement of the Shares in a merger, recapitalization, reorganization or similar corporate transaction.

**1.2 Payment.** Purchaser hereby delivers payment of the Purchase Price as follows (check and complete as appropriate):

- in cash (by check) in the amount of \$ \_\_\_\_\_, receipt of which is acknowledged by the Company.
- by cancellation of indebtedness of the Company owed to Purchaser in the amount of \$ \_\_\_\_\_.
- by the waiver hereby of compensation due or accrued for services rendered in the amount of \$ \_\_\_\_\_.
- by delivery of \_\_\_\_\_ fully-paid, nonassessable and vested shares of the Common Stock of the Company owned by Purchaser free and clear of all liens, claims, encumbrances or security interests, valued at the current Fair Market Value of \$ \_\_\_\_\_ per share (a) for which the Company has received "full payment of the purchase price" within the meaning of SEC Rule 144, (if purchased by use of a promissory note, such note has been fully paid with respect to such vested shares), or (b) that were obtained by Purchaser in the open public market.

**2. DELIVERIES.** Purchaser hereby delivers to the Company at its principal executive offices, Attn: President: (a) this completed and signed Agreement, (b) two (2) copies of a blank Stock Power and Assignment Separate from Stock Certificate in the form of Exhibit 1 attached hereto (the

“**Stock Powers**”), both executed by Purchaser and Purchaser’s spouse, if any, (c) if Purchaser is married, a Consent of Spouse in the form of Exhibit 2 attached hereto (the “**Spouse Consent**”) executed by Purchaser’s spouse, and (d) the Purchase Price and payment or other provision for any applicable tax obligations (if paid by check, a copy of such check shall be attached hereto as Exhibit 3). Upon its receipt of the Purchase Price, payment or other provision for any applicable tax obligations and all the documents to be executed and delivered by Purchaser to the Company, the Company will issue a duly executed stock certificate evidencing the Shares in the name of Purchaser, to be placed in escrow as provided in Section 7.2 until expiration or termination of the Company’s Refusal Right and Repurchase Option described in Sections 5 and 6.

**3. REPRESENTATIONS AND WARRANTIES OF PURCHASER.** Purchaser represents and warrants to the Company as follows.

**3.1 Agrees to Terms of the Plan.** Purchaser has received a copy of the Plan, has read and understands the terms of the Plan and this Agreement, and agrees to be bound by their terms and conditions. Purchaser acknowledges that there may be adverse tax consequences upon disposition of the Shares, and that Purchaser should consult a tax adviser prior to such exercise or disposition.

**3.2 Shares Not Registered or Qualified.** Purchaser understands and acknowledges that the Shares have not been registered with the SEC under the Securities Act, or with any securities regulatory agency administering any state securities laws, and that, notwithstanding any other provision of this Agreement to the contrary, the purchase of any Shares is expressly conditioned upon compliance with the Securities Act and all applicable state securities laws. Purchaser agrees to cooperate with the Company to ensure compliance with such laws.

**3.3 No Transfer Unless Registered or Exempt.** Purchaser understands that Purchaser may not transfer any Shares unless such Shares are registered under the Securities Act or qualified under applicable state securities laws or unless, in the opinion of counsel to the Company, exemptions from such registration and qualification requirements are available. Purchaser understands that only the Company may file a registration statement with the SEC and that the Company is under no obligation to do so with respect to the Shares. Purchaser has also been advised that exemptions from registration and qualification may not be available or may not permit Purchaser to transfer all or any of the Shares in the amounts or at the times proposed by Purchaser.

**3.4 SEC Rule 701.** Shares that are issued pursuant to SEC Rule 701 promulgated under the Securities Act and may become freely tradable by non-affiliates (under limited conditions regarding the method of sale) ninety (90) days after the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the SEC, subject to the lengthier market standoff agreement contained in Section 4 of this Agreement or any other agreement entered into by Purchaser. Affiliates must comply with the provisions (other than the holding period requirements) of Rule 144 which permits certain limited sales of unregistered securities. Rule 144 is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that use of a promissory note as payment for the Shares may not be deemed to be “full payment of the purchase price” within the meaning of Rule 144 unless certain conditions are met and that, accordingly, the Rule 144 holding period of such Shares may not begin to run until such Shares are fully paid for within the meaning of Rule 144. Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an “affiliate” of the Company or if “current public information” about the Company (as defined in Rule 144) is not publicly available.

**3.5 Access to Information.** Purchaser has had access to all information regarding the Company and its present and prospective business, assets, liabilities and financial condition that Purchaser reasonably considers important in making the decision to purchase the Shares, and Purchaser has had ample opportunity to ask questions of the Company's representatives concerning such matters and this investment.

**3.6 Understanding of Risks.** Purchaser is fully aware of: (a) the highly speculative nature of the investment in the Shares; (b) the financial hazards involved; (c) the lack of liquidity of the Shares and the restrictions on transferability of the Shares (e.g., that Purchaser may not be able to sell or dispose of the Shares or use them as collateral for loans); (d) the qualifications and backgrounds of the management of the Company; and (e) the tax consequences of investment in the Shares.

**3.7 Purchase for Own Account for Investment.** Purchaser is purchasing the Shares for Purchaser's own account for investment purposes only and not with a view to, or for sale in connection with, a distribution of the Shares within the meaning of the Securities Act. Purchaser has no present intention of selling or otherwise disposing of all or any portion of the Shares and no one other than Purchaser has any beneficial ownership of any of the Shares.

**3.8 No General Solicitation.** At no time was Purchaser presented with or solicited by any publicly issued or circulated newspaper, mail, radio, television or other form of general advertising or solicitation in connection with the offer, sale and purchase of the Shares.

**3.9 SEC Rule 144.** Purchaser has been advised that SEC Rule 144 promulgated under the Securities Act, which permits certain limited sales of unregistered securities, is not presently available with respect to the Shares and, in any event, requires that the Shares be held for a minimum of six (6) months, and in certain cases one (1) year, after they have been purchased and paid for (within the meaning of Rule 144). Purchaser understands that Rule 144 may indefinitely restrict transfer of the Shares so long as Purchaser remains an "affiliate" of the Company or if "current public information" about the Company (as defined in Rule 144) is not publicly available.

**4. MARKET STANDOFF AGREEMENT.** Purchaser agrees in connection with any registration of the Company's securities under the Securities Act or other public offering that, upon the request of the Company or the underwriters managing any registered public offering of the Company's securities, Purchaser will not sell or otherwise dispose of any Shares without the prior written consent of the Company or such managing underwriters, as the case may be, for a period of time (not to exceed one hundred eighty (180) days) after the effective date of such registration requested by such managing underwriters and subject to all restrictions as the Company or the managing underwriters may specify for employee-stockholders generally. Further, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news, or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the 16-day period beginning on the last day of the restricted period, then, if required by the underwriters or the Company, the restrictions imposed by this Section 4 shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. For purposes of this Section 4, the term "Company" shall include any wholly-owned subsidiary of the Company into which the Company merges or consolidates. In order to enforce the foregoing covenant, the Company shall have the right to place restrictive legends on the certificates representing the shares subject to this Section and to impose stop transfer instructions with respect to the Shares until the end of such period. Purchaser further agrees that the underwriters of any such public offering shall be third party beneficiaries of this Section 4 and agrees to enter into any agreement reasonably required by the underwriters to implement the foregoing.

**5. COMPANY'S REFUSAL RIGHT.** Before any Vested Shares held by Purchaser or any transferee of such Vested Shares (either sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including, without limitation, a transfer by gift or operation of law), the Company and/or its assignee(s) will have a right of first refusal to purchase the Vested Shares to be sold or transferred (the "**Offered Shares**") on the terms and conditions set forth in this Section (the "**Refusal Right**").

**5.1 Notice of Proposed Transfer.** The Holder of the Offered Shares will deliver to the Company a written notice (the "**Notice**") stating: (a) the Holder's bona fide intention to sell or otherwise transfer the Offered Shares; (b) the name and address of each proposed purchaser or other transferee (the "**Proposed Transferee**"); (c) the number of Offered Shares to be transferred to each Proposed Transferee; (d) the bona fide cash price or other consideration for which the Holder proposes to transfer the Offered Shares (the "**Offered Price**"); and (e) that the Holder acknowledges this Notice is an offer to sell the Offered Shares to the Company and/or its assignee(s) pursuant to the Company's Refusal Right at the Offered Price as provided for in this Agreement.

**5.2 Exercise of Refusal Right.** At any time within thirty (30) days after the date the Notice is effective pursuant to Section 9.2, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all (or, with the consent of the Holder, less than all) the Offered Shares proposed to be transferred to any one or more of the Proposed Transferees named in the Notice, at the purchase price, determined as specified below.

**5.3 Purchase Price.** The purchase price for the Offered Shares purchased under this Section will be the Offered Price, *provided* that if the Offered Price consists of no legal consideration (as, for example, in the case of a transfer by gift) the purchase price will be the fair market value of the Offered Shares as determined in good faith by the Company's Board of Directors. If the Offered Price includes consideration other than cash, then the value of the non-cash consideration, as determined in good faith by the Company's Board of Directors, will conclusively be deemed to be the cash equivalent value of such non-cash consideration.

**5.4 Payment.** The purchase price for the Offered Shares will be paid, at the option of the Company and/or its assignee(s) (as applicable), by check or by cancellation of all or a portion of any outstanding purchase money indebtedness owed by the Holder to the Company (or to such assignee, in the case of a purchase of Offered Shares by such assignee) or by any combination thereof. The purchase price will be paid without interest within sixty (60) days after the Company's receipt of the Notice, or, at the option of the Company and/or its assignee(s), in the manner and at the time(s) set forth in the Notice.

**5.5 Holder's Right to Transfer.** If all of the Offered Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Offered Shares to each Proposed Transferee at the Offered Price or at a higher price, *provided* that (a) such sale or other transfer is consummated within one hundred twenty (120) days after the date of the Notice, (b) any such sale or other transfer is effected in compliance with all applicable securities laws, and (c) each Proposed Transferee agrees in writing that the provisions of this Section will continue to apply to the Offered Shares in the hands of such Proposed Transferee. If the Offered Shares described in the Notice are not transferred to each Proposed Transferee within such one hundred twenty (120) day period, then a new Notice must be given to the Company pursuant to which the Company will again be offered the Refusal Right before any Shares held by the Holder may be sold or otherwise transferred.

**5.6 Exempt Transfers.** Notwithstanding the foregoing, the following transfers of Vested Shares will be exempt from the Refusal Right: (a) the transfer of any or all of the Vested Shares

during Purchaser's lifetime by gift or on Purchaser's death by will or intestacy to Purchaser's "Immediate Family" (as defined below) or to a trust for the benefit of Purchaser or Purchaser's Immediate Family, *provided* that each transferee agrees in a writing satisfactory to the Company that the provisions of this Section will continue to apply to the transferred Vested Shares in the hands of such transferee; (b) any transfer of Vested Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities (except that, subject to Section 5.7, unless the agreement of merger or consolidation expressly otherwise provides, the Refusal Right will continue to apply thereafter to such Vested Shares, in which case the surviving entity of such merger or consolidation shall succeed to the rights of the Company under this Section); or (c) any transfer of Vested Shares pursuant to the winding up and dissolution of the Company. As used herein, the term "**Immediate Family**" will mean Purchaser's spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of the Purchaser or the Purchaser's spouse, the spouse of any of the above, or a person registered with the state of his or her residence as a same-sex domestic partner or a person deemed to be a spousal equivalent for whom the following circumstances are true: (a) irrespective of whether or not the Participant and the Spousal Equivalent are the same sex, they are the sole spousal equivalent of the other for the last twelve (12) months, (b) they intend to remain so indefinitely, (c) neither are married to anyone else, (d) both are at least 18 years of age and mentally competent to consent to contract, (e) they are not related by blood to a degree of closeness that which would prohibit legal marriage in the state in which they legally reside, (f) they are jointly responsible for each other's common welfare and financial obligations, and (g) they reside together in the same residence for the last twelve (12) months and intend to do so indefinitely.

**5.7 Termination of Refusal Right.** The Refusal Right will terminate as to all Shares (a) on the effective date of the first sale of Common Stock of the Company to the public pursuant to a registration statement filed with and declared effective by the SEC under the Securities Act or, if expressly approved by the Board as terminating the Refusal Right, under the laws of any other country having substantially the same effect (other than a registration statement relating solely to the issuance of Common Stock pursuant to a business combination or an employee incentive or benefit plan) or (b) on any transfer or conversion of Shares made pursuant to a statutory merger or statutory consolidation of the Company with or into another entity or entities if the common stock of the surviving entity or any direct or indirect parent entity thereof is registered under the Securities Exchange Act of 1934, as amended.

**6. COMPANY'S REPURCHASE OPTION FOR UNVESTED SHARES.** The Company, or its assignee, shall have the option to repurchase all or a portion of the Purchaser's Unvested Shares (as defined below) on the terms and conditions set forth in this Section (the "**Repurchase Option**") if Purchaser is Terminated (as defined in the Plan) for any reason, or no reason, including without limitation, Purchaser's death, Disability (as defined in the Plan), voluntary resignation or termination by the Company with or without Cause. Notwithstanding the foregoing, the Company shall retain the Repurchase Option for Unvested Shares only as to that number of Unvested Shares (whether or not exercised) that exceeds the number of Vested Shares that remain unexercised.

**6.1 Termination and Termination Date.** In case of any dispute as to whether Purchaser is Terminated, the Committee shall have discretion to determine whether Purchaser has been Terminated and the effective date of such Termination (the "**Termination Date**").

**6.2 Vested and Unvested Shares.** Shares that are vested pursuant to the schedule set forth in this Section 6.2 are "**Vested Shares**." Shares that are not vested pursuant to such schedule are "**Unvested Shares**." On the Effective Date of the Shares will be Unvested Shares (the "**Initial Unvested Shares**"). Provided Participant continues to provide services to the Company or any Subsidiary or Parent of the Company at all times from the Effective Date until (the "**First Vesting Date**"), then on the First Vesting Date one-fourth (1/4<sup>th</sup>) of the Initial Unvested Shares

will become Vested Shares, and on the same day of each succeeding calendar month thereafter (or if there is no such day in any month, then the last day of such calendar month), an additional one forty-eighth 1/48<sup>th</sup> of the Initial Unvested Shares shall vest until (a) all of the Shares are vested, (b) the Termination Date or (c) vesting otherwise terminates pursuant to this Agreement or the Plan. If application of the vesting schedule above causes a fractional share, such share shall be rounded down to the nearest whole share for each month except for the last month in such vesting period, at the end of which last month the full remainder of the Shares shall vest.

**6.3 Exercise of Repurchase Option.** At any time within ninety (90) days after the Purchaser's Termination Date (or, in the case of securities issued upon purchase of Shares after the Purchaser's Termination Date, within ninety (90) days after the date of such exercise), the Company, or its assignee, may elect to repurchase any or all the Purchaser's Unvested Shares by giving Purchaser written notice of exercise of the Repurchase Option, specifying the number of Unvested Shares to be repurchased. Such Unvested Shares shall be repurchased at the lower of fair market value, as determined by the Board, or the Purchase Price Per Share, proportionately adjusted for any stock split or similar change in the capital structure of the Company as set forth in Section 2.2 of the Plan (the "**Repurchase Price**"). The Repurchase Price shall be payable, at the option of the Company or its assignee, by check or by cancellation of all or a portion of any outstanding purchase money indebtedness owed by Purchaser to the Company and/or such assignee, or by any combination thereof. The Repurchase Price shall be paid without interest within the term of the Repurchase Option as described in the first sentence of this Section 8.2.

**6.4 Right of Termination Unaffected.** Nothing in this Agreement shall be construed to limit or otherwise affect in any manner whatsoever the right or power of the Company (or any Parent or Subsidiary of the Company) to terminate Purchaser's employment or other relationship with Company (or the Parent or Subsidiary of the Company) at any time, for any reason or no reason, with or without Cause.

## **7. ADDITIONAL RESTRICTIONS UPON SHARE OWNERSHIP OR TRANSFER.**

**7.1 Rights as a Stockholder.** Subject to the terms and conditions of this Agreement, Purchaser will have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that Shares are issued to Purchaser until such time as Purchaser disposes of the Shares or the Company and/or its assignee(s) exercise(s) the Refusal Right or the Repurchase Option. Upon an exercise of the Refusal Right or the Repurchase Option, Purchaser will have no further rights as a holder of the Shares so purchased upon such exercise, other than the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and Purchaser will promptly surrender the stock certificate(s) evidencing the Shares so purchased to the Company for transfer or cancellation.

**7.2 Escrow.** As security for Purchaser's faithful performance of this Agreement, Purchaser agrees, immediately upon receipt of the stock certificate(s) evidencing the Shares, to deliver such certificate(s), together with the Stock Powers executed by Purchaser and by Purchaser's spouse, if any (with the date, name of transferee, stock certificate number and number of Shares left blank), to the Secretary of the Company or other designee of the Company (the "**Escrow Holder**"), who is hereby appointed to hold such certificate(s) and Stock Powers in escrow and to take all such actions and to effectuate all such transfers and/or releases of such Shares as are in accordance with the terms of this Agreement. Purchaser and the Company agree that Escrow Holder will not be liable to any party to this Agreement (or to any other person or entity) for any actions or omissions unless Escrow Holder is grossly negligent or intentionally fraudulent in carrying out the duties of Escrow Holder under this Agreement. Escrow Holder may rely upon any letter, notice or other document executed with any signature purported to be genuine and may rely on the advice of counsel and obey any order of any court with respect to the transactions contemplated by this Agreement. The Shares will be released from escrow upon termination of both the Refusal Right and the Repurchase Option.

**7.3 Encumbrances on Shares.** Purchaser may not grant a lien or security interest in, or pledge, hypothecate or encumber, any Unvested Shares. Purchaser may grant a lien or security interest in, or pledge, hypothecate or encumber Vested Shares only if each party to whom such lien or security interest is granted, or to whom such pledge, hypothecation or other encumbrance is made, agrees in a writing satisfactory to the Company that: (a) such lien, security interest, pledge, hypothecation or encumbrance will not apply to such Vested Shares after they are acquired by the Company and/or its assignees under this Section; and (b) the provisions of this Section will continue to apply to such Vested Shares in the hands of such party and any transferee of such party.

**7.4 Restrictions on Transfers.** Unvested Shares may not be sold or otherwise transferred by Purchaser without the Company's prior written consent. Purchaser hereby agrees that Purchaser shall make no disposition of the Shares (other than as permitted by this Agreement) unless and until:

(a) Purchaser shall have notified the Company of the proposed disposition and provided a written summary of the terms and conditions of the proposed disposition;

(b) Purchaser shall have complied with all requirements of this Agreement applicable to the disposition of the Shares, including but not limited to the Refusal Right, the Market Standoff and the Repurchase Option; and

(c) Purchaser shall have provided the Company with written assurances, in form and substance satisfactory to counsel for the Company, that (i) the proposed disposition does not require registration of the Shares under the Securities Act or under any state securities laws, and (ii) all appropriate actions necessary for compliance with the registration and qualification requirements of the Securities Act and any state securities laws, or of any exemption from registration or qualification, available thereunder (including Rule 144) have been taken.

Each person (other than the Company) to whom the Shares are transferred by means of one of the permitted transfers specified in this Agreement must, as a condition precedent to the validity of such transfer, acknowledge in writing to the Company that such person is bound by the provisions of this Agreement and that the transferred Shares are subject to the Company's Refusal Right or the Repurchase Option granted hereunder and the market stand-off provisions of Section 4 hereof, to the same extent such Shares would be so subject if retained by the Purchaser.

**7.5 Restrictive Legends and Stop-transfer Orders.** Purchaser understands and agrees that the Company will place the legends set forth below or similar legends on any stock certificate(s) evidencing the Shares, together with any other legends that may be required by applicable laws, the Company's Certificate of Incorporation or Bylaws, any other agreement between Purchaser and the Company or any agreement between Purchaser and any third party:

*THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE*

THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON PUBLIC RESALE AND TRANSFER, INCLUDING THE RIGHT OF FIRST REFUSAL AND THE REPURCHASE OPTION HELD BY THE ISSUER AND/OR ITS ASSIGNEE(S), AND A MARKET STANDOFF AGREEMENT, AS SET FORTH IN A RESTRICTED STOCK PURCHASE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH PUBLIC SALE AND TRANSFER RESTRICTIONS INCLUDING THE RIGHT OF FIRST REFUSAL, THE REPURCHASE OPTION AND THE MARKET STANDOFF ARE BINDING ON TRANSFEREES OF THESE SHARES.

Purchaser agrees that, to ensure compliance with the restrictions imposed by this Agreement, the Company may issue appropriate "stop-transfer" instructions to its transfer agent, if any, and if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records. The Company will not be required (a) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (b) to treat as owner of such Shares, or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares have been so transferred.

**8. TAX CONSEQUENCES.** PURCHASER UNDERSTANDS THAT PURCHASER MAY SUFFER ADVERSE TAX CONSEQUENCES AS A RESULT OF PURCHASER'S PURCHASE OR DISPOSITION OF THE SHARES. PURCHASER REPRESENTS (a) THAT PURCHASER HAS CONSULTED WITH ANY TAX ADVISER THAT PURCHASER DEEMS ADVISABLE IN CONNECTION WITH THE PURCHASE OR DISPOSITION OF THE SHARES AND (b) THAT PURCHASER IS NOT RELYING ON THE COMPANY FOR ANY TAX ADVICE. Purchaser hereby acknowledges that Purchaser has been informed that, with respect to Unvested Shares, unless an election is filed by Purchaser with the Internal Revenue Service (and, if necessary, the proper state taxing authorities) within 30 days after the purchase of the Shares electing, pursuant to Section 83(b) of the Internal Revenue Code (and similar state tax provisions, if applicable), to be taxed currently on any difference between the Purchase Price of the Unvested Shares and their Fair Market Value on the date of purchase, there will be a recognition of taxable income to Purchaser, measured by the excess, if any, of the Fair Market Value of the Unvested Shares, at the time they cease to be Unvested Shares, over the Purchase Price for such Shares. Purchaser represents that Purchaser has consulted any tax advisers Purchaser deems advisable in connection with Purchaser's purchase of the Shares and the filing of the election under Section 83(b) and similar tax provisions. A form of Election under Section 83(b) is attached hereto as Exhibit 4 for reference. *BY PROVIDING THE FORM OF ELECTION THE COMPANY DOES NOT THEREBY UNDERTAKE TO FILE THE ELECTION FOR PURCHASER, WHICH OBLIGATION TO FILE SHALL REMAIN SOLELY WITH PURCHASER.*

## **9. GENERAL PROVISIONS.**

**9.1 Successors and Assigns.** The Company may assign any of its rights under this Agreement, including its rights to purchase Shares under the Refusal Right or the Repurchase Option. Neither Purchaser, nor any of Purchaser's successors and assigns, may assign, whether voluntarily or by



operation of law, any of its rights and obligations under this Agreement, except with the prior written consent of the Company. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Agreement will be binding upon Purchaser and Purchaser's heirs, executors, administrators, legal representatives, successors and assigns.

**9.2 Notices.** Any and all notices required or permitted to be given to a party pursuant to the provisions of this Agreement will be in writing and will be effective and deemed to provide such party sufficient notice under this Agreement on the earliest of the following: (a) at the time of personal delivery, if delivery is in person; (b) at the time of transmission by facsimile, addressed to the other party at its facsimile number specified herein (or hereafter modified by subsequent notice to the parties hereto), with confirmation of receipt made by both telephone and printed confirmation sheet verifying successful transmission of the facsimile; (c) one (1) business day after deposit with an express overnight courier for United States deliveries, or two (2) business days after such deposit for deliveries outside of the United States, with proof of delivery from the courier requested; or (d) three (3) business days after deposit in the United States mail by certified mail (return receipt requested) for United States deliveries. All notices for delivery outside the United States will be sent by facsimile or by express courier. All notices not delivered personally or by facsimile will be sent with postage and/or other charges prepaid and properly addressed to the party to be notified at the address or facsimile number set forth below the signature lines of this Agreement, or at such other address or facsimile number as such other party may designate by one of the indicated means of notice herein to the other parties hereto. Notices to the Company will be marked "Attention: President."

**9.3 Further Assurances.** The parties agree to execute such further documents and instruments and to take such further actions as may be reasonably necessary to carry out the purposes and intent of this Agreement.

**9.4 Entire Agreement.** The Plan is incorporated herein by reference. The Plan and this Agreement, together with all Exhibits hereto, constitute the entire agreement and understanding of the parties with respect to the subject matter of this Agreement, and supersede all prior understandings and agreements, between the parties hereto with respect to the specific subject matter hereof.

**9.5 Severability.** If any provision of this Agreement is determined by any court or arbitrator of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such provision will be enforced to the maximum extent possible given the intent of the parties hereto. If such clause or provision cannot be so enforced, such provision shall be stricken from this Agreement and the remainder of this Agreement shall be enforced as if such invalid, illegal or unenforceable clause or provision had (to the extent not enforceable) never been contained in this Agreement. Notwithstanding the forgoing, if the value of this Agreement based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

**9.6 Execution.** This Agreement may be entered into in two or more counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement. This Agreement may be executed and delivered by facsimile and, upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

**IN WITNESS WHEREOF**, the Company has caused this Restricted Stock Purchase Agreement to be executed by its duly authorized representative, and Purchaser has executed this Restricted Stock Purchase Agreement, as of the date first set forth above.

**G-ZERO THERAPEUTICS, INC.**

**PURCHASER**

By: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please print name and title)

\_\_\_\_\_  
(Please print name)

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Fax No. \_\_\_\_\_

**List of Exhibits**

- Exhibit 1: Stock Power and Assignment Separate from Stock Certificate
- Exhibit 2: Spouse Consent
- Exhibit 3: Copy of Purchaser's Check
- Exhibit 4: Form of Election Pursuant to Section 83(b)

**EXHIBIT 1**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

**STOCK POWER AND ASSIGNMENT  
SEPARATE FROM STOCK CERTIFICATE**

FOR VALUE RECEIVED and pursuant to that certain Restricted Stock Purchase Agreement No. \_\_\_\_\_ dated as of \_\_\_\_\_, \_\_\_\_\_, (the "**Agreement**"), the undersigned hereby sells, assigns and transfers unto \_\_\_\_\_, \_\_\_\_\_ shares of the Common Stock \$0.0001 par value per share, of G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**"), standing in the undersigned's name on the books of the Company represented by Certificate No(s) \_\_\_\_\_ delivered herewith, and does hereby irrevocably constitute and appoint the Secretary of the Company as the undersigned's attorney-in-fact, with full power of substitution, to transfer said stock on the books of the Company. ***THIS ASSIGNMENT MAY ONLY BE USED AS AUTHORIZED BY THE AGREEMENT AND ANY EXHIBITS THERETO.***

Dated: \_\_\_\_\_,

**PURCHASER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Please Print Name)

\_\_\_\_\_  
(Spouse's Signature, if any)

\_\_\_\_\_  
(Please Print Spouse's Name)

**Instructions to Purchaser:** Please do not fill in any blanks other than the signature line. The purpose of this Stock Power and Assignment is to enable the Company to acquire the shares and to exercise its "Refusal Right" or "Repurchase Option" set forth in the Agreement without requiring additional signatures on the part of the Purchaser or Purchaser's Spouse, if any.

**EXHIBIT 2**

**SPOUSE CONSENT**

**SPOUSE CONSENT**

The undersigned spouse of \_\_\_\_\_ (the "**Purchaser**") has read, understands, and hereby approves the Restricted Stock Purchase Agreement (the "**Agreement**") between Purchaser and G-Zero Therapeutics, Inc. (the "**Company**"). In consideration of the Company's granting my spouse the right to purchase the Shares as set forth in the Agreement, the undersigned hereby agrees to be irrevocably bound by the Agreement and further agrees that any community property interest I may have in the Shares shall similarly be bound by the Agreement. The undersigned hereby appoints Purchaser as my attorney-in-fact with respect to any amendment or exercise of any rights under the Agreement.

Date: \_\_\_\_\_

\_\_\_\_\_  
Print Name of Purchaser's Spouse

\_\_\_\_\_  
Signature of Purchaser's Spouse

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Check this box, if Purchaser is not married.**

**EXHIBIT 3**

**COPY OF PURCHASER'S CHECK**

**EXHIBIT 4**

**FORM OF SECTION 83(B) ELECTION**



**ELECTION UNDER SECTION 83(b)  
OF THE INTERNAL REVENUE CODE**

The undersigned Taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended, to include the excess, if any, of the fair market value of the property described below at the time of transfer over the amount paid for such property, as compensation for services in the calculation of regular gross income.

1. TAXPAYER'S NAME: \_\_\_\_\_

TAXPAYER'S ADDRESS: \_\_\_\_\_

SOCIAL SECURITY NUMBER: \_\_\_\_\_

2. The property with respect to which the election is made is described as follows: \_\_\_\_\_ shares of Common Stock of G-Zero Therapeutics, Inc., a Delaware corporation (the "**Company**") which were transferred pursuant to a Restricted Stock Purchase Agreement entered into by Taxpayer and the Company, which is Taxpayer's employer or the corporation for whom the Taxpayer performs services.
3. The date on which the shares were transferred pursuant to the purchase of the shares was \_\_\_\_\_, and this election is made for calendar year \_\_\_\_\_.
4. The shares received are subject to the following restrictions: The Company may repurchase all or a portion of the shares at the Taxpayer's original purchase price under certain conditions at the time of Taxpayer's termination of employment or services.
5. The fair market value of the shares (without regard to restrictions other than restrictions which by their terms will never lapse) was \$ \_\_\_\_\_ per share at the time of purchase.
6. The amount paid for such shares by Taxpayer was \$ \_\_\_\_\_ per share.
7. The Taxpayer has submitted a copy of this statement to the Company.

*THIS ELECTION MUST BE FILED WITH THE INTERNAL REVENUE SERVICE ("IRS"), AT THE OFFICE WHERE THE TAXPAYER FILES ANNUAL INCOME TAX RETURNS, WITHIN 30 DAYS AFTER THE DATE OF TRANSFER OF THE SHARES, AND MUST ALSO BE FILED WITH THE TAXPAYER'S INCOME TAX RETURNS FOR THE CALENDAR YEAR. THE ELECTION CANNOT BE REVOKED WITHOUT THE CONSENT OF THE IRS.*

Dated: \_\_\_\_\_

\_\_\_\_\_  
Taxpayer's Signature

**SECOND AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT**

THIS SECOND AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT (this "**Second Amendment**") is entered into and effective as of May 10, 2016, by and between G1 Therapeutics, Inc., a Delaware corporation (the "**Company**"), and Mark A. Velleca (the "**Executive**").

**WITNESSETH:**

WHEREAS, Executive and the Company entered into an Executive Employment Agreement effective as of May 19, 2014, as amended by a First Amendment to Executive Employment Agreement effective as of February 1, 2015 (together, the "**Employment Agreement**");

WHEREAS, Executive and the Company wish to alter certain terms of the Employment Agreement, particularly with respect to Executive's compensation; and

WHEREAS, in light of the foregoing, Executive and the Company desire to mutually and voluntarily amend the Employment Agreement pursuant to the terms as set forth herein.

NOW, THEREFORE, in consideration of the foregoing, the mutual promises herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows.

1. **AMENDMENT TO SECTION 3(a) OF EMPLOYMENT AGREEMENT.** Section 3(a) of the Employment Agreement is modified by replacing the existing Section 3(a) in its entirety with a new Section 3(a) as follows:

(a) **BASE SALARY.** The Company will pay Employee a base salary (the "**Base Salary**") at an annual rate of Four Hundred and Five Thousand Dollars (\$405,000.00) (such increase in Base Salary to be retroactive to January 1, 2016), payable in equal installments in accordance with the Company's customary payroll practices as in effect from time to time. The Base Salary may be reviewed from time to time by the Company and may be increased in the sole discretion of the Board. The Base Salary may also be decreased in connection with any Company-wide decrease in executive compensation.

2. **REMAINDER OF EMPLOYMENT AGREEMENT.** Except as expressly set forth in this Second Amendment, the provisions of the Employment Agreement remain in full force and effect, in their entirety, in accordance with their terms.

3. **MISCELLANEOUS.** This Second Amendment shall be governed, construed, and interpreted in accordance with the laws of the State of North Carolina, without giving effect to conflicts of laws principles. The parties agree that this Second Amendment may only be modified in a signed writing executed by both parties. This Second Amendment shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, successors and assigns. This Second Amendment may be executed in separate counterparts, each of which is

deemed to be an original and all of which taken together constituted one agreement. Facsimile or PDF reproductions of original signatures will be deemed binding for the purpose of the execution of this Second Amendment.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have executed this Second Amendment to Executive Employment Agreement to be effective as of the day and year first written above.

Company:

G1 THERAPEUTICS, INC.

Executive:

By: /s/ Seth Rudnick

Seth Rudnick  
Chairman of the Board

/s/ Mark A. Velleca

Mark A. Velleca

**FIRST AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT**

THIS FIRST AMENDMENT TO EXECUTIVE EMPLOYMENT AGREEMENT (this "**Amendment**") is entered into and effective as of February 1, 2015, by and between GI Therapeutics, Inc., a Delaware corporation (the "**Company**") and Mark A. Velleca (the "**Executive**").

**WITNESSETH:**

WHEREAS, Executive and the Company entered into an Executive Employment Agreement effective as of May 19, 2014, (the "**Employment Agreement**");

WHEREAS, Executive and the Company wish to alter certain terms of the Employment Agreement, particularly with respect to Executive's employment compensation; and

WHEREAS, in light of the foregoing, Executive and the Company desire to mutually and voluntarily amend the Employment Agreement pursuant to the terms as set forth herein.

NOW, THEREFORE, in consideration of the foregoing, the mutual promises herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows.

1. **AMENDMENT TO SECTION 3(a) OF THE EMPLOYMENT AGREEMENT.** Section 3(a) of the Employment Agreement is modified by replacing the existing Section 3(a) in its entirety with a new Section 3(a) as follows:

(a) **BASE SALARY.** The Company will pay Employee a base salary (the "**Base Salary**") at an annual rate of Three Hundred Ninety-Two Thousand Dollars (\$392,000.00), payable in equal installments in accordance with the Company's customary payroll practices as in effect from time to time. The Base Salary may be reviewed from time to time by the Company and may be increased in the sole discretion of the Board. The Base Salary may also be decreased in connection with any Company-wide decrease in executive compensation.

2. **AMENDMENT TO SECTION 3(e) OF THE EMPLOYMENT AGREEMENT.** Section 3(e) of the Employment Agreement is modified by replacing the existing Section 3(e) in its entirety with a new Section 3(e) as follows:

(e) **RELOCATION ASSISTANCE.** Employee will be based out of the Company's offices in Research Triangle Park, North Carolina, but the parties understand and acknowledge that Employee will initially and for some time maintain a primary residence in Washington, DC. To assist with Employee's travel to North Carolina and eventual relocation, the Company will provide the following benefits.

(i) The Company will reimburse Employee for reasonable expenses incurred in relocating himself and his family from his existing residence to his new residence in the Research Triangle Park area, up to a maximum of \$25,000. Covered expenses will include carrier transportation by an approved carrier for normal household goods and personal effects, exclusive of automobiles, boats, recreational vehicles, explosives, firearms, outdoor structures, items of exceptional value, or any item in which the moving costs exceed its value, and customary packing and unpacking charges. Employee may also use this benefit to defray closing costs associated with the purchase of a residence in North Carolina. Employee will have eighteen (18) months from the Effective Date in which to use this benefit. Within thirty (30) days after incurring any covered expense, Employee will provide such documentation as may be reasonably requested by the Company to substantiate expenses to be reimbursed pursuant to this section.

(ii) [intentionally omitted]

(iii) All payments and reimbursements provided to Employee pursuant to this Section 3(e) will be treated in accordance with applicable law, including IRS regulations and guidance. Employee will be responsible for the payment of any taxes owed by him as a result of such payments and reimbursements.

3. REMAINDER OF EMPLOYMENT AGREEMENT. Except as expressly set forth in this Amendment, the provisions of the Employment Agreement remain in full force and effect, in their entirety, in accordance with their terms.

4. MISCELLANEOUS. This Amendment shall be governed, construed, and interpreted in accordance with the laws of the State of North Carolina, without giving effect to conflicts of laws principles. The parties agree that this Amendment may only be modified in a signed writing executed by both parties. This Amendment shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, successors and assigns. This Amendment may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one agreement. Facsimile or PDF reproductions of original signatures will be deemed binding for the purpose of the execution of this Amendment.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have executed this First Amendment to Executive Employment Agreement to be effective as of the day and year first above written.

Company:

Executive:

**G1 THERAPEUTICS, INC.**

By: /s/ Seth Rudick

Seth Rudick

Chairman of the Board

/s/ Mark A. Velleca

Mark A. Velleca

## EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT (the "**Agreement**"), is made and entered into effective as of May 19, 2014 (the "**Effective Date**"), by and between G1 Therapeutics, Inc., a Delaware corporation (the "**Company**"), and Mark A. Velleca ("**Employee**").

1. **EMPLOYMENT; DUTIES.** The Company agrees to employ Employee as its Chief Executive Officer, and Employee agrees to accept such employment upon the terms and conditions hereinafter set forth. Employee will perform such services for the Company as are customarily associated with his position Chief Executive Officer and as may otherwise be assigned to the Employee from time to time by the Company's Board of Directors (the "**Board**"). In addition, Employee will devote his full business time and attention to the business and affairs of the Company, and will perform his duties diligently and to the best of his ability, in compliance with the Company's policies and procedures and the laws and regulations that apply to the Company's business.

2. **TERM; TERMINATION.** Employee's employment under this Agreement will commence as of the Effective Date and will continue until terminated by either party. Employee's employment with the Company is at-will, and either party can terminate the employment relationship and/or this Agreement at any time, for any or no cause or reason, and with or without prior notice, subject to the provisions of Section 4 of this Agreement. Upon termination of Employee's employment by either party for any reason, Employee will resign his position(s), if any, as an officer or director of the Company, as a member of the Board or any Board committees, as well as any other positions he may hold with or for the benefit of the Company and/or its affiliates.

3. **COMPENSATION.** As compensation for the services to be rendered by Employee under this Agreement, the Company will provide the following compensation and benefits during Employee's employment hereunder.

(a) **BASE SALARY.** The Company will pay Employee a base salary (the "**Base Salary**") at an annual rate of Three Hundred Fifty Thousand Dollars (\$350,000.00), payable in equal installments in accordance with the Company's customary payroll practices as in effect from time to time. The Base Salary may be reviewed from time to time by the Company and may be increased in the sole discretion of the Board. The Base Salary may also be decreased in connection with any Company-wide decrease in executive compensation.

(b) **BONUS FOR CALENDAR YEAR 2014.** For calendar year 2014 only, Employee will be entitled to receive a bonus in the amount of Fifty Thousand Dollars (\$50,000) (the "**2014 Bonus**"). The 2014 Bonus is conditioned upon Employee's submission of a strategic plan to the Board, and the Board's approval of such plan in its sole discretion, no later than December 31, 2014. The 2014 Bonus will be paid, if earned, no later than December 31, 2014, and Employee must be employed by the Company on the date on which the 2014 Bonus is paid in order to receive the 2014 Bonus.



(c) **BONUS FOR YEARS AFTER 2014.** Beginning in 2015 and continuing thereafter so long as Employee remains employed by the Company, Employee will be eligible to receive an annual calendar year bonus based upon Employee's and the Company's achievement of certain individual and Company goals that will be set for Employee by the Company's Board or a designated committee thereof (the "**Annual Bonus**"). The amount of the target Annual Bonus will be equal to thirty percent (30%) of Employee's then-current Base Salary as of the date of the payment. The Board will have the sole discretion to set the applicable individual and Company goals, to determine whether the goals have been met, and to determine the amount of the Annual Bonus. The Annual Bonus for any given year will be paid between January 1 and January 31 in the year immediately following the year in which the Annual Bonus, if any, is earned. Employee must be employed by the Company on December 31 of the bonus year in order to receive the Annual Bonus for that year.

(d) **STOCK OPTIONS.** Subject to approval by the Board, Employee will be granted, effective as of the later of the date Employee begins his employment with the Company or the date of Board approval, incentive stock options to purchase shares of the Company's common stock representing five percent (5%) of the Company's total outstanding shares of common stock, determined on a fully-diluted, as-converted into common stock basis, taking into account for such purpose the issuance of 7,486,996 shares of Series A Preferred Stock pursuant to the Company's currently anticipated closing of the second tranche of its Series A Preferred Stock Financing (the "**Options**"). The Options will be granted pursuant to and subject to the terms and conditions of the Company's 2011 Equity Incentive Plan (the "**Plan**") and will be further subject to the terms of a stock option agreement as approved by the Board setting forth the exercise price, vesting conditions and other restrictions. One fourth of the total number of such Options will vest on the first anniversary of the date of grant of the option, and one forty eighth (1/48th) of the total number of Options will vest each month over the following thirty six (36) months thereafter, so long as Employee remains employed by the Company through each such vesting date. Fifty Percent (50%) of any unvested Options will immediately vest upon the consummation of a Change in Control (as defined below) and any remaining unvested Options will immediately vest if Employee's employment is terminated by the Company without Cause (as defined below) or Employee resigns with Good Reason (as defined below) within ninety (90) days following a Change in Control. A "**Change in Control**" means (i) the Company's merger or consolidation with or into another entity such that the stockholders of the Company prior to such transaction do not or are not expected to own a majority of the voting stock of the surviving entity, (ii) the sale or other disposition of all or substantially all of the assets of the Company, (iii) the sale or other disposition of greater than 50% of the then-outstanding voting stock of the Company by the holders thereof to one or more persons or entities who are not then stockholders of the Company.

(e) **RELOCATION ASSISTANCE.** Employee will be based out of the Company's offices in Research Triangle Park, North Carolina, but the parties understand and acknowledge that Employee will initially and for some time maintain a primary residence in Washington, DC. To assist with Employee's travel to North Carolina and eventual relocation, the Company will provide the following benefits.

(i) The Company will reimburse Employee for reasonable expenses incurred in relocating himself and his family from his existing residence to his new residence in the

Research Triangle Park area, up to a maximum of \$25,000. Covered expenses will include carrier transportation by an approved carrier for normal household goods and personal effects, exclusive of automobiles, boats, recreational vehicles, explosives, firearms, outdoor structures, items of exceptional value, or any item in which the moving costs exceed its value, and customary packing and unpacking charges. Employee may also use this benefit to defray closing costs associated with the purchase of a residence in North Carolina. Employee will have eighteen (18) months from the Effective Date in which to use this benefit. Within thirty (30) days after incurring any covered expense, Employee will provide such documentation as may be reasonably requested by the Company to substantiate expenses to be reimbursed pursuant to this section.

(ii) The Company will provide Employee with up to \$3,500 per month for (A) Employee's use in securing and maintaining housing (e.g., rent, utilities) in the Research Triangle Park area prior to his permanent relocation; and/or (B) reimbursement of Employee's travel expenses between Washington, DC and Research Triangle Park prior to Employee's permanent relocation. For purposes of clarification, the total of the housing payment and reimbursements paid by the Company under clauses (A) and (B) above will not exceed \$3,500 for any given month, nor will the cumulative total of all housing payments and reimbursements by the Company under this clause (ii) exceed \$65,000. The benefits described in this clause (ii) will end upon the earlier of (1) the termination of Employee's employment with the company for any reason, (2) Employee's permanent relocation to North Carolina, or (3) November 18, 2015.

(iii) All payments and reimbursements provided to Employee pursuant to this Section 3(e) will be treated in accordance with applicable law, including IRS regulations and guidance. Employee will be responsible for the payment of any taxes owed by him as a result of such payments and reimbursements.

(f) VACATION. Employee will be eligible to earn paid time off in accordance with the Company's policies, as they may be amended from time to time.

(g) BENEFITS. Employee will (subject to applicable eligibility requirements) receive such other benefits as are provided from time to time to other similarly-situated employees of the Company pursuant to the Company's policies and procedures as they may be instituted from time to time. All such benefits are subject to the provisions of their respective plan documents in accordance with their terms. Employee acknowledges and agrees that the Company has the unilateral right to amend, modify or terminate its employee benefit plans or policies to the maximum extent allowed by law.

(h) EXPENSE REIMBURSEMENT. The Company will reimburse Employee for all reasonable business expenses incurred by Employee in connection with the performance of his duties hereunder, subject to Employee's compliance with the Company's reimbursement policies in effect from time to time. Without limiting the foregoing, the Company will reimburse Employee for the cost of maintaining his professional licensure and his membership in the American Society of Hematology. Any expenses in excess of Five Thousand Dollars must be approved in advance by the Chairman of the Board.

(i) WITHHOLDINGS. The Company will withhold from any amounts payable under this Agreement, such federal, state and local taxes, as the Company reasonably determines are required to be withheld pursuant to applicable law. The Company encourages Employee to seek the advice of his tax and/or legal advisors with respect to this Agreement, including in connection with his compensation and benefits under this Section 3.

#### 4. EFFECT OF TERMINATION.

(a) GENERALLY. When Employee's employment with the Company is terminated for any reason, Employee, or his estate, as the case may be, will be entitled to receive the compensation and benefits earned through the effective date of termination, along with reimbursement for any approved business expenses that Employee has timely submitted for reimbursement in accordance with the Company's expense reimbursement policy or practice.

(b) SEPARATION BENEFITS UPON CERTAIN TERMINATIONS. If the Company terminates Employee's employment without Cause (as defined below), or if Employee resigns his employment for Good Reason (as defined below), then conditioned upon Employee executing a Release (as defined below) following such termination, Employee will be entitled to receive the continued payment of Employee's then-current Base Salary for a period of (i) six (6) months after termination if the termination occurs within the first twelve (12) months of Employee's employment with the Company, or (ii) twelve (12) months of after termination if the termination occurs after Employee has completed twelve (12) months of employment with the Company (the "**Separation Benefits**"). The Separation Benefits are conditioned upon Employee executing a release of claims in a form satisfactory to the Company (the "Release") within the time specified therein, which Release is not revoked within any time period allowed for revocation under applicable law. The Salary Continuation will be payable to Employee over time in accordance with the Company's payroll practices and procedures beginning on the sixtieth (60th) day following the termination of Employee's employment with the Company, provided that the Company, in its sole discretion, may begin the payments earlier. For avoidance of doubt, the termination of Employee's employment as a result of his death or disability (meaning the inability of Employee, due to the condition of his physical, mental or emotional health, effectively to perform the essential functions of his job with or without reasonable accommodation for a continuous period of more than 90 days or for 90 days in any period of 180 consecutive days, as determined by the Board in its sole discretion in consultation with a physician retained by the Company) will not constitute a termination without Cause triggering the rights described in this Section 4(b).

(c) CAUSE. For purposes of this Agreement, "**Cause**" means: (i) Employee's fraud, embezzlement or misappropriation with respect to the Company; (ii) Employee's material breach of fiduciary duties to the Company; (iii) Employee's willful or negligent misconduct that has or may reasonably be expected to have a material adverse effect on the property, business, or reputation of the Company; (iv) Employee's material breach of this Agreement; (v) Employee's willful failure or refusal to perform his material duties under this Agreement or failure to follow any specific lawful instructions of the Board; (vi) Employee's conviction or plea of nolo contendere in respect of a felony or of a misdemeanor involving moral turpitude; (vii) Employee's alcohol or substance abuse which has a material adverse effect on Employee's ability

to perform his duties under this Agreement; or (viii) Employee's engagement in a form of discrimination or harassment prohibited by law (including, without limitation, discrimination or harassment based on race, color, religion, sex, national origin, age or disability). In the event that the Company concludes that Employee has engaged in acts constituting in Cause as defined in clause (iii), (iv), (v), or (vii) above, prior to terminating this Agreement for Cause the Company will provide Employee with at least fifteen (15) days' advance written notice of the specific circumstances constituting such Cause, and an opportunity to correct such circumstances.

(d) **GOOD REASON.** In order for Employee to resign for Good Reason, Employee must provide written notice to the Company of the existence of the Good Reason condition within thirty (30) days of the initial existence of such Good Reason condition. Upon receipt of such notice, the Company will have fifteen (15) days during which it may attempt to remedy the Good Reason condition and not be required to provide for the benefits described in Section 4(b) above as a result of such proposed resignation if successfully remedied. If the Good Reason condition is not remedied within such fifteen (15) day period, Employee may resign based on the Good Reason condition specified in the notice effective no later than thirty (30) days following the expiration of the fifteen (15) day cure period. For purposes of this Agreement, "Good Reason" means the occurrence of any of the following events without Employee's consent: (i) a material reduction of Employee's Base Salary not generally applicable to other executive-level employees of the Company, (ii) a material diminution of the Employee's authority, duties, or responsibilities, or (iii) the Company's material breach of this Agreement.

(e) **APPLICATION OF INTERNAL REVENUE CODE SECTION 409A.** Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Section 4 that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") will not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) (a "Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A. The parties intend that each installment of the Separation Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, the parties intend that payments of the Separation Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9). However, if the Company determines that the Separation Benefits constitute "deferred compensation" under Section 409A and Employee is, on the termination of service, a "specified employee" of the Company or any successor entity thereto, as such term is defined in Section 409A, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Separation Benefits payments will be delayed until the earlier to occur of: (i) the date that is six months and one day after Employee's Separation From Service, or (ii) the date of Employee's death (such applicable date, the "Specified Employee Initial Payment Date"), the Company (or the successor entity thereto, as applicable) will (A) pay to Employee a lump sum amount equal to the sum of the Separation Benefits payments that Employee would otherwise have received

through the Specified Employee Initial Payment Date if the commencement of the payment of the Separation Benefits had not been so delayed pursuant to this Section and (B) commence paying the balance of the Separation Benefits in accordance with the applicable payment schedules set forth in this Agreement.

(f) NO FURTHER OBLIGATIONS. Except as expressly provided above or as otherwise required by law, the Company will have no obligations to Employee in the event of the termination of this Agreement for any reason.

5. EMPLOYEE REPRESENTATIONS. Employee represents and warrants that he is not obligated or restricted under any agreement (including any non-competition or confidentiality agreement), judgment, decree, order or other restraint of any kind that could impair Employee's ability to perform the duties and obligations required of Employee hereunder. Employee further agrees that he will not divulge to the Company any confidential information and/or trade secrets belonging to others, including Employee's former employers, nor will the Company seek to elicit from Employee such information. Consistent with the foregoing, Employee will not provide to the Company, and the Company will not request, any documents or copies of documents containing such information.

#### 6. CONFIDENTIALITY.

(a) Employee acknowledges that the Company will give Employee access to certain highly-sensitive, confidential, and proprietary information belonging to the Company or third parties who may have furnished such information under obligations of confidentiality, relating to and used in the Company's business (collectively, "**Confidential Information**"). Employee acknowledges that, unless otherwise available to the public, Confidential Information includes, but is not limited to, the following categories of Company related confidential or proprietary information and material, whether in electronic, print, or other form, including all copies, notes, or other reproductions or replicas thereof: financial statements and information; budgets, forecasts, and projections; business and strategic plans; marketing, sales, and distribution strategies; research and development projects; records relating to any intellectual property developed by, owned by, controlled, or maintained by the Company; information related to the Company's inventions, research, products, designs, methods, formulae, techniques, systems, processes; customer lists; non-public information relating to the Company's customers, suppliers, distributors, or investors; the specific terms of the Company's agreements or arrangements, whether oral or written, with any customer, supplier, vendor, or contractor with which the Company may be associated from time to time; and any and all information relating to the operation of the Company's business which the Company may from time to time designate as confidential or proprietary or that Employee reasonably knows should be, or has been, treated by the Company as confidential or proprietary. Confidential Information encompasses all formats in which information is preserved, whether electronic, print, or any other form, including all originals, copies, notes, or other reproductions or replicas thereof.

(b) Confidential Information does not include any information that: (i) at the time of disclosure is generally known to, or readily ascertainable by, the public; (ii) becomes known to the public through no fault of Employee or other violation of this Agreement; or (iii) is disclosed to Employee by a third party under no obligation to maintain the confidentiality of the information.

(c) Employee acknowledges that the Confidential Information is owned or licensed by the Company; is unique, valuable, proprietary and confidential; and derives independent actual or potential commercial value from not being generally known or available to the public. Employee hereby relinquishes, and agrees that he will not at any time claim, any right, title or interest of any kind in or to any Confidential Information.

(d) During and after his employment with the Company, Employee will hold in trust and confidence all Confidential Information, and will not disclose any Confidential Information to any person or entity, except in the course of performing duties assigned by the Company or as authorized in writing by the Company. Employee further agrees that during and after his employment with the Company, Employee will not use any Confidential Information for the benefit of any third party, except in the course of performing duties assigned by the Company or as authorized in writing by the Company.

(e) The restriction in Section 6(d) above will not apply to any information that Employee is required to disclose by law, provided that the Employee (i) notifies the Company of the existence and terms of such obligation, (ii) gives the Company a reasonable opportunity to seek a protective or similar order to prevent or limit such disclosure, and (iii) only discloses that information actually required to be disclosed.

(f) Any trade secrets of the Company will be entitled to all of the protections and benefits under the North Carolina Trade Secrets Protection Act, N.C. Gen. Stat. § 66-152 et seq., and any other applicable law. If any information that the Company deems to be a trade secret is found by a court of competent jurisdiction not to be a trade secret, such information will, nevertheless, be considered Confidential Information for purposes of this Agreement.

(g) Upon request during employment and immediately at the termination of this Agreement, Employee will return to the Company all Confidential Information in any form (including all copies and reproductions thereof) and all other property whatsoever of the Company in his possession or under his control. If requested by the Company, Employee will certify in writing that all such materials have been returned to the Company. Employee also expressly agrees that immediately upon the termination of his employment with the Company for any reason, Employee will cease using any secure website, web portals, e-mail system, or phone system or voicemail service provided by the Company for the use of its employees.

## 7. INTELLECTUAL PROPERTY.

(a) Employee agrees that all developments or inventions (including without limitation any and all software programs (source and object code), algorithms and applications, concepts, designs, discoveries, improvements, processes, techniques, know-how and data) that result from work performed by Employee for the Company, whether or not patentable or registrable under copyright or similar statutes or subject to analogous protection ("Inventions"), will be the sole and exclusive property of the Company or its nominees, and Employee will and hereby does

assign to the Company all rights in and to such Inventions upon the creation of any such Invention, including, without limitation: (i) patents, patent applications and patent rights throughout the world; (ii) rights associated with works of authorship throughout the world, including copyrights, copyright applications, copyright registrations, mask work rights, mask work applications and mask work registrations; (iii) rights relating to the protection of trade secrets and confidential information throughout the world; (iv) rights analogous to those set forth herein and any other proprietary rights relating to intangible property; and (v) divisions, continuations, renewals, reissues and extensions of the foregoing (as applicable), now existing or hereafter filed, issued or acquired (collectively, the "IP Rights").

(b) For avoidance of doubt, if any Inventions fall within the definition of "work made for hire", as such term is defined in 17 U.S.C. § 101, such Inventions will be considered "work made for hire" and the copyright of such Inventions will be owned solely and exclusively by the Company. If any Inventions does not fall within such definition of "work made for hire", then Employee's right, title and interest in and to such Inventions will be assigned to the Company pursuant to Section 7(a) above.

(c) The Company and its nominees will have the right to use and/or to apply for statutory or common law protections for such Inventions in any and all countries. Employee further agrees, at the Company's expense, to: (i) reasonably assist the Company in obtaining and from time to time enforcing such IP Rights relating to Inventions, and (ii) execute and deliver to the Company or its nominee upon reasonable request all such documents as the Company or its nominee may reasonably determine are necessary or appropriate to effect the purposes of this Section 7, including assignments of inventions. Such documents may be necessary to: (1) vest in the Company or its nominee clear and marketable title in and to Inventions; (2) apply for, prosecute and obtain patents, copyrights, mask works rights and other rights and protections relating to Inventions; or (3) enforce patents, copyrights, mask works rights and other rights and protections relating to Inventions. Employee's obligations pursuant to this Section 7 will continue beyond the termination of Employee's employment with the Company. If the Company is unable for any reason to secure Employee's signature to any lawful and necessary document required to apply for or execute any patent, trademark, copyright or other applications with respect to any Inventions (including renewals, extensions, continuations, divisions or continuations in part thereof), Employee hereby irrevocably designates and appoints the Company and its then current Chief Executive Officer as Employee's agent and attorney-in-fact to act for and in behalf and instead of Employee, to execute and file any such application and to do all other lawfully permitted acts to further the prosecution and issuance of patents, trademarks, copyrights or other rights thereon with the same legal force and effect as if executed by Employee. In the event the Company utilizes the power of attorney set forth in the preceding sentence, the Company will provide Employee with written notice of the terms and circumstances of such utilization within thirty (30) days following such utilization.

(d) The obligations of Employee under Section 7(a) will not apply to any Invention that Employee developed entirely on his own time without using the Company's equipment, supplies, facility or trade secret information, except for those Inventions that (i) relate to the Company's business or actual or demonstrably anticipated research or development, or (ii) result from any work performed by Employee for Company. Employee will bear the burden of proof in establishing the applicability of this subsection to a particular circumstance,

8. **ENFORCEMENT.** Employee acknowledges and agrees that the Company will suffer irreparable harm in the event that Employee breaches any of Employee's obligations under Sections 6 or 7 of this Agreement and that monetary damages would be inadequate to compensate the Company for such breach. Accordingly, Employee agrees that, in the event of a breach by Employee of any of Employee's obligations under Sections 6 or 7 of this Agreement, the Company will be entitled to obtain from any court of competent jurisdiction preliminary and permanent injunctive relief, and expedited discovery for the purpose of seeking relief, in order to prevent or to restrain any such breach. The Company will be entitled to recover its costs incurred in connection with any action to enforce Sections 6 or 7 of this Agreement, including reasonable attorneys' fees and expenses, to the maximum extent permitted by law.

9. **NOTICES.** Any notice required to be given hereunder will be sufficient if in writing and hand delivered or sent by mail, return receipt requested, postage prepaid, in the case of Employee, to his address shown on the Company's records, and in the case of the Company, to 79 T.W. Alexander Drive, 4401 Research Commons, Suite 105, Research Triangle Park, NC 27709, or to such other addresses as either party shall specify to the other.

10. **AMENDMENT; WAIVER.** No amendment of any provision of this Agreement will be valid unless the amendment is in writing and signed by the Company and Employee. No waiver of any provision of this Agreement will be valid unless the waiver is in writing and signed by the waiving party. The failure of a party at any time to require performance of any provision of this Agreement will not affect such party's rights at a later time to enforce such provision. No waiver by a party of any breach of this Agreement will be deemed to extend to any other breach hereunder or affect in any way any rights arising by virtue of any other breach.

11. **GOVERNING LAW; VENUE.** This Agreement will be governed by and construed in accordance with the laws of the State of North Carolina, without regard to that body of law known as choice of law. The parties agree that any litigation arising out of or related to this Agreement or Employee's employment by the Company will be brought exclusively in any state or federal court in Orange County, North Carolina. Each party (i) consents to the personal jurisdiction of said courts, (ii) waives any venue or inconvenient forum defense to any proceeding maintained in such courts, and (iii) agrees not to bring any proceeding arising out of or relating to this Agreement or Employee's employment by the Company in any other court.

12. **BENEFIT.** This Agreement will be binding upon and will inure to the benefit of each of the parties hereto, and to their respective heirs, representatives, successors and permitted assigns. Employee may not assign any of his rights or delegate any of his duties under this Agreement.

13. **ENTIRE AGREEMENT.** This Agreement contains the entire agreement and understanding by and between the Company and Employee with respect to the subject matter hereof, and any representations, promises, agreements or understandings, written or oral, not herein contained will be of no force or effect.



14. CAPTIONS; RULE OF CONSTRUCTION. The captions in this Agreement are for convenience only and in no way define, bind or describe the scope or intent of this Agreement. The terms and provisions of this Agreement will not be construed against the drafter or drafters hereof. All parties hereto agree that the language of this Agreement will be construed as a whole according to its fair meaning and not strictly for or against any of the parties hereto.

15. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same agreement. Facsimile or PDF reproductions of original signatures will be deemed binding for the purpose of the execution of this Agreement.

16. SEVERABILITY. Each provision of this Agreement is severable from every other provision of this Agreement. Any provision of this Agreement that is determined by any court of competent jurisdiction to be invalid or unenforceable will not affect the validity or enforceability of any other provision. Any provision of this Agreement held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

17. SURVIVAL. The terms of Sections 4 through 17 will survive the termination or expiration of this Agreement for any reason.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the Effective Date.

**G1 THERAPEUTICS, INC.**

By: /s/ Thomas K. Laundon

Name: Thomas K. Laundon

Title: Secretary

**EMPLOYEE:**

/s/ Mark A. Velleca [SEAL]

Mark A. Velleca

**DIRECTOR AGREEMENT**

This DIRECTOR AGREEMENT (the "Agreement"), is made and entered into as of this 15<sup>th</sup> day of July 2016 and effective as of July 1, 2016 (the "Effective Date"), by and between G1 Therapeutics, Inc., a Delaware corporation (the "Company"), and Seth Rudnick, MD ("Board Member"). This Agreement replaces that certain Director Agreement, effective July 1, 2014, by and between the Company and the Board Member, which expired by its terms on June 30, 2016.

1. **APPOINTMENT; DUTIES.** The Company hereby retains Board Member to, and Board Member hereby agrees to, serve as a member of and Chairman of the Company's Board of Directors (the "Board"), subject to any required Board and/or security holder approval. As a member and Chairman of the Board, Board Member will be expected to (i) attend any meetings of the Board; (ii) lead Board meetings and conference calls; (iii) provide guidance and advice to the Company on matters and developments potentially relevant to the Company's business and areas of research and development and otherwise as either the Company or Board Member considers appropriate; (iv) develop, review and comment on the Company's strategies for research and development, product definition, regulatory approvals, business development and marketing, partnering, fund raising as well as its related presentations and materials; (v) provide consulting services to the Company at its request, including a reasonable amount of informal consultation in person, over the telephone, by email, or otherwise as requested by the Company, at times reasonably convenient to Board Member; and (vi) with the Company's approval in each instance, make introductions to individuals and corporations that might be of assistance to the Company.

2. **TERM.** The term of Board Member's appointment and services under this Agreement will commence as of the Effective Date and will continue through June 30, 2018 (the "Term"). Notwithstanding the foregoing, either Board Member or the Company may terminate this Agreement at any time by providing the other at least thirty (30) days prior written notice, or as may be otherwise provided by Section 8 of this Agreement. Upon termination of this Agreement by either party for any reason, or upon expiration of the Term, Board Member will resign his position as a director of the Company, as Chairman of the Board and as a member of any Board committees.

3. **COMPENSATION.**

(a) **STOCK OPTIONS.** In consideration for service under this Agreement, Board Member has previously been granted a non-statutory stock option to purchase 175,000 shares of common stock of the Company (the "Option Shares") pursuant to and subject to the terms and conditions of the Company's 2011 Equity Incentive Plan (the "Plan"), with an exercise price of \$1.39 per Option Share, and with One-Twenty-Fourth (1/24<sup>th</sup>) of the Option Shares vesting on July 31, 2016, and One-Twenty-Fourth (1/24<sup>th</sup>) of the Option Shares vesting on the last day of each month thereafter during the term of this Agreement until fully vested, provided that Board Member continues to provide services to the Company under this Agreement as of any such vesting date. Notwithstanding anything to the contrary in the Plan or in the stock option agreement relating to the Option Shares, in the event of Board Member's continued service to the Company in another capacity following the termination of his directorship pursuant to this Agreement, the exercise period for all of Board Member's vested Option Shares as of the date of termination will be extended for the period of continued service by Board Member to the Company in another capacity.

(b) EXPENSE REIMBURSEMENT. Board Member will be reimbursed for reasonable travel and other out-of-pocket expenses incurred by Board Member in connection with the services provided by Board Member under this Agreement, provided that (i) Board Member provides receipts and other reasonable documentation as requested by the Company and (ii) Board Member provides a written report of his expenses on a quarterly basis to the Chair of the Company's Compensation Committee for review. Board Member will also be expected to abide by any travel and/or out-of-pocket expense guidelines that are provided to him by the Company. Subject to this Section 3(b), in the event Board Member's air travel plans require Board Member to take a flight over three (3) hours in duration, the Company agrees to permit reimbursement for first-class air travel for that flight, to the extent it is reasonably available.

4. RETURN OF PROPERTY. Upon the termination of Board Member's directorship with the Company for any reason, Board Member will return to the Company all personal property belonging to the Company that is in Board Member's possession or control as of the date of such termination, including, without limitation, all Confidential Information (as defined below) and any documents related thereto; provided that, in the event of Board Member's continued service to the Company in another capacity following the termination of his directorship pursuant to this Agreement, Board Member shall be permitted to retain any such property to the extent it is necessary to fulfill Board Member's obligations to the Company in such other capacity, subject to the terms and conditions governing such continued service to the Company. Such Company property will be returned in the same condition as when provided to Board Member, reasonable wear and tear excepted.

5. CONFIDENTIALITY. Board Member shall keep in strict confidence and shall not disclose or make available to third parties any information, technical data, know-how or documents relating to (i) Board Member's services under this Agreement or (ii) the research, developments, inventions, processes, trade secrets, data, techniques, designs, drawings, products, product plans, services, customers, marketing, software, finances, business methods, business or affairs or confidential or proprietary information of the Company (other than information in the public domain through no fault of Board Member's own) (collectively, "Confidential Information"), except with the prior written consent of the Company, and Board Member shall only use Confidential Information as necessary to perform services on behalf of the Company under this Agreement or any other agreement pursuant to which Board Member is providing services on behalf of the Company. Board Member's obligations under this Section 5 shall survive termination or expiration of this Agreement for a period of three (3) years from the date of termination. Notwithstanding the foregoing, any trade secrets of the Company will be entitled to all of the protections and benefits under the North Carolina Trade Secrets Protection Act and any other applicable law, and the protections provided for in this Section 5 will remain in effect indefinitely as to Confidential Information that is a trade secret (as defined by statute and common law).

6. INTELLECTUAL PROPERTY. Board Member shall promptly disclose and hereby transfers and assigns to the Company all right, title and interest in and to all techniques, methods, processes, software, documents, formulae, improvements, inventions and discoveries

(and any patents issuing thereon) made or conceived or reduced to practice by Board Member, solely or jointly with others, in the course of providing services hereunder or with the use of materials or facilities of the Company, during the period of this Agreement, and all intellectual property rights related to any of the foregoing (collectively "Inventions"). Board Member shall not publish any such Invention without the Company's prior written consent. When requested by the Company, Board Member will make available to the Company all papers, notes, drawings, data and other information relating to any such Inventions. Board Member will promptly sign any documents (including U.S. and foreign copyright, trademark and patent assignments) requested by the Company related to the above assignment of rights and such Inventions and will cooperate with the Company at the Company's request and expense in preparation and prosecution of any U.S. or foreign copyright, trademark or patent applications related to such rights and Inventions. Board Member's obligations under this Section 6 shall survive termination or expiration of this Agreement for the period of three (3) years from the date of termination. The obligations of Board Member under this Section 6 will not apply to a particular circumstance to the extent such obligations are unenforceable in such circumstance pursuant to the provisions of North Carolina General Statute Section 66-57.1 et seq. (as amended from time to time), provided that the obligations of Board Member under Section 6 will continue to be binding upon Board Member in all other circumstances. Board Member will bear the burden of proof in establishing the applicability of such statute to a particular circumstance.

7. **ENFORCEMENT.** Board Member acknowledges and agrees that the Company will suffer irreparable harm in the event that Board Member breaches any of Board Member's obligations under Sections 4, 5 or 6 of this Agreement and that monetary damages would be inadequate to compensate the Company for such breach. Accordingly, Board Member agrees that, in the event of a breach by Board Member of any of Board Member's obligations under Sections 4, 5 or 6 of this Agreement, the Company will be entitled to obtain from any court of competent jurisdiction preliminary and permanent injunctive relief, and expedited discovery for the purpose of seeking relief, in order to prevent or to restrain any such breach. The Company will be entitled to recover its costs incurred in connection with any action to enforce Sections 4, 5 or 6 of this Agreement, including reasonable attorneys' fees and expenses, to the maximum extent permitted by law.

8. **NOTICE OF OUTSIDE ACTIVITIES.** Board Member acknowledges that the services to be performed for the Company hereunder are essential to the Company and, therefore, during the Term hereof, Board Member will provide prior written notice to the Company of any consulting projects for or outside employment with companies whose business would be, "Directly Competitive" with the business of the Company. Following its receipt of such notification, the Company may terminate this Agreement at any time effective immediately. "Directly Competitive" shall mean companies that engage in the research and development and/or sale of selective CDK4/6 inhibitors. The Company acknowledges Board Member's commitments to Liquidia (and any of its derivative companies), Aralez Pharmaceuticals, Square 1 Bank, Emory's DRIVE Enterprise, Meryx and Abyrx are not directly competitive to this Company.

9. **INDEPENDENT CONTRACTOR.** Board Member's relationship with the Company shall be that of an independent contractor and Board Member will not be considered an employee of the Company. Board Member will not be eligible for any employee benefits, nor will

the Company make deductions from payments made to Board Member for any taxes or other withholding obligations, which shall be Board Member's responsibility. Board Member shall not have authority to enter into contracts that bind the Company or create obligations on the part of the Company without the express, prior authorization of the Company.

10. NOTICES. Any notice required to be given hereunder will be sufficient if in writing and hand delivered or sent by mail, return receipt requested, postage prepaid, in the case of Board Member, to his address shown on the Company's records, and in the case of the Company, to 79 TW Alexander Drive, 4401 Research Commons, Suite 105, Research Triangle Park, North Carolina 27709, or to such other addresses as either party shall specify to the other.

11. WAIVER. No waiver of any provision of this Agreement will be valid unless the same is in writing and signed by the party against whom such waiver is sought to be enforced. Failure to insist upon strict compliance with any of the terms, covenants or conditions hereof will not be deemed a waiver of such terms, covenants or conditions, nor will any waiver or relinquishment of any right or power granted hereunder at any particular time be deemed a waiver or relinquishment of such rights or power at any other time or times.

12. GOVERNING LAW; VENUE. This Agreement will be governed by and construed in accordance with the laws of the State of North Carolina, without regard to that body of law known as choice of law. The parties agree that any litigation arising out of or related to this Agreement or Board Member's directorship with the Company will be brought exclusively in any state or federal court in Orange County, North Carolina. Each party (i) consents to the personal jurisdiction of said courts, (ii) waives any venue or inconvenient forum defense to any proceeding maintained in such courts, and (iii) agrees not to bring any proceeding arising out of or relating to this Agreement or Board Member's directorship with the Company in any other court.

13. BENEFIT. This Agreement will be binding upon and will inure to the benefit of each of the parties hereto, and to their respective heirs, representatives, successors and permitted assigns. Board Member may not assign any of his rights or delegate any of his duties under this Agreement.

14. ENTIRE AGREEMENT. This Agreement contains the entire agreement and understanding by and between the Company and Board Member with respect to the terms described herein, and any representations, promises, agreements or understandings, written or oral, not herein contained will be of no force or effect. No change or modification hereof will be valid or binding unless the same is in writing and signed by the parties hereto.

15. CAPTIONS; RULE OF CONSTRUCTION. The captions in this Agreement are for convenience only and in no way define, bind or describe the scope or intent of this Agreement. The terms and provisions of this Agreement will not be construed against the drafter or drafters hereof. All parties hereto agree that the language of this Agreement will be construed as a whole according to its fair meaning and not strictly for or against any of the parties hereto.

16. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same agreement. Facsimile or PDF reproductions of original signatures will be deemed binding for the purpose of the execution of this Agreement.

17. SEVERABILITY. Each provision of this Agreement is severable from every other provision of this Agreement. Any provision of this Agreement that is determined by any court of competent jurisdiction to be invalid or unenforceable will not affect the validity or enforceability of any other provision. Any provision of this Agreement held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

18. SURVIVAL. The terms of Sections 4 through 7 and 9 through 18 will survive the termination or expiration of this Agreement for any reason.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the Effective Date.

**G1 THERAPEUTICS, INC:**

By: /s/ Mark Velleca  
Name: Mark Velleca, MD, PhD  
Title: Chief Executive Officer

**BOARD MEMBER:**

/s/ Seth Rudnick  
Seth Rudnick, MD

ADVISORY BOARD MEMBER AGREEMENT

Seth Rudnick, M.D.  
13 Aronimink Lane, #5341  
Pinehurst, NC 28374

Dear Dr. Rudnick:

This ADVISORY BOARD MEMBER AGREEMENT (the "**Agreement**"), is made and entered into as of this 15<sup>th</sup> day of July 2016 and effective as of July 1, 2016 (the "**Effective Date**"), by and between G1 Therapeutics, Inc., a Delaware corporation (the "**Company**"), and you. This Agreement replaces that certain Advisory Board Member Agreement, effective July 1, 2014, by and between the Company and you, which expired by its terms on June 30, 2016.

1. **Services.** The Company wishes to retain your services as a member of the Company's Scientific Advisory Board ("SAB") and Clinical Advisory Board ("CAB"), pursuant to which you will be expected to attend any meetings of the SAB and CAB, and fulfill the additional responsibilities of an SAB and CAB member as described on Exhibit A and Exhibit A-1, respectively attached hereto. This Agreement (including the exhibits hereto) shall constitute an agreement between you and the Company and contain all the terms and conditions relating to the services you are to provide.

2. **Term.** The Company expects that the term of this Agreement shall be for two years starting on the Effective Date and ending on June 30, 2018 (the "**Term**"). Notwithstanding the foregoing, either you or the Company may terminate this Agreement at any time by providing the other at least thirty (30) days prior written notice, or as may be otherwise provided in this Agreement.

3. **Consideration.** As consideration for your services and other obligations during the Term, the Company will pay you cash compensation in the amount of Six Thousand Dollars (\$6,000) annually, payable in two equal semi-annual installments (the "**Annual Fee**"). The Annual Fee installments shall be paid within thirty (30) days of receipt of an invoice from you. In addition, the Company shall pay you cash compensation for each SAB or CAB meeting attended, or any other advisory meeting requested by the Company, (the "**Meeting Fee**"). The Meeting Fee will be equal to Three Thousand Dollars (\$3,000) for each SAB or CAB meeting attended in person and One Thousand Five Hundred Dollars (\$1,500) for each SAB or CAB meeting attended by phone or conference call. The Meeting Fee for any meetings that take place shall be paid within thirty (30) days of receipt of an invoice from you

4. **Expenses.** You shall be reimbursed for reasonable travel and other out-of-pocket expenses incurred by you in connection with your services under this Agreement, provided that (i) you provide receipts and other reasonable documentation as requested by the Company and (ii) any such expenses in excess of \$500.00 must be approved in advance, either verbally or in writing by the Company. You will also be expected to abide by any travel and/or out-of-pocket expense guidelines that are provided to you by the Company. You are permitted to use your private aircraft at the IRS reimbursement rate with prior Company authorization, either verbally or in writing.



5. **Independent Contractor.** Your relationship with the Company shall be that of an independent contractor and you will not be considered an employee of the Company. You will not be eligible for any employee benefits, nor will the Company make deductions from payments made to you for any taxes or other withholding obligations, which shall be your responsibility. You shall not have authority to enter into contracts that bind the Company or create obligations on the part of the Company without the express, prior authorization of the Company.

6. **Performance.** All services to be performed by you will be as agreed between you and the Chief Executive Officer of the Company. Except as required for attendance at SAB and CAB meetings or specifically requested by the Company, the manner in which the services are to be performed and the specific hours to be worked shall be determined by you. You shall report to the Chief Executive Officer, or other Company officer designated by the Company, concerning your services performed under this Agreement.

7. **Confidentiality.** You shall keep in strict confidence and shall not disclose or make available to third parties any information, technical data, know-how or documents relating to (i) your services under this Agreement or (ii) the research, developments, inventions, processes, trade secrets, data, techniques, designs, drawings, products, product plans, services, customers, marketing, software, finances, business methods, business or affairs or confidential or proprietary information of the Company (other than information in the public domain through no fault of your own) (collectively, "**Confidential Information**"), except with the prior written consent of the Company, and you shall only use Confidential Information as necessary to perform services on behalf of the Company under this Agreement or any other agreement pursuant to which you are providing services on behalf of the Company. Upon termination of this Agreement, you will destroy or return to the Company all documents and other materials related to the services provided hereunder or furnished to you by the Company provided that, in the event of your continued service to the Company in another capacity following the termination of this Agreement, you shall be permitted to retain any such property to the extent it is necessary to fulfill your obligations to the Company in such other capacity, subject to the terms and conditions governing such continued service to the Company. Your obligations under this Paragraph 7 shall survive termination of this Agreement for a period of three (3) years from the date of termination.

8. **Intellectual Property.** You shall promptly disclose and hereby transfer and assign to the Company all right, title and interest to all techniques, methods, processes, software, documents, formulae, improvements, inventions and discoveries (and any patents issuing thereon) made or conceived or reduced to practice by you, solely or jointly with others, in the course of providing services hereunder or with the use of materials or facilities of the Company, during the period of this Agreement, and all intellectual property rights related to any of the foregoing (collectively "**Inventions**"). You shall not publish any such Invention without the Company's prior written consent. When requested by the Company, you will make available to the Company all papers, notes, drawings, data and other information relating to any such Inventions. You will promptly sign any documents (including U.S. and foreign copyright, trademark and patent assignments) requested by the Company related to the above assignment of rights and such Inventions and will cooperate with the Company at the Company's request and expense in preparation and prosecution of any U.S. or foreign copyright, trademark or patent applications related to such rights and Inventions. Your obligations under this Paragraph 8 shall survive termination of this Agreement for the period of three (3) years from the date of termination.

9. **Notice of Consulting Activities.** You acknowledge that the services to be performed for the Company hereunder are essential to the Company and, therefore, during the term hereof, you will provide prior written notice to the Company of any consulting projects for companies whose business would be, "Directly Competitive" with the business of the Company. Following its receipt of such notification, the Company may terminate this Agreement at any time effective immediately. "Directly Competitive" shall mean companies that engage in the research and development and/or sale of selective CDK4/6 inhibitors. The Company acknowledges your commitments to Liquidia (and any of its derivative companies), Aralez Pharmaceuticals, Square 1 Bank, Emory's DRIVE Enterprise, Meryx and Abyrx are not being directly competitive to this Company.

10. **Amendment.** Any amendment to this Agreement must be in a writing signed by you and the Company.

11. **Notice.** All notices, requests and other communications called for by this Agreement shall be deemed to have been given when received if made in writing and mailed, return receipt requested, postage prepaid, if to you at the address set forth above and if to the Company to 79 TW Alexander Drive, 4401 Research Commons, Suite 105, Research Triangle Park, North Carolina 27709, or to such other addresses as either party shall specify to the other.

12. **Indemnification.** You agree to indemnify and hold the Company harmless from all claims, losses, expenses, fees including reasonable attorneys' fees, costs and judgments that may be asserted against the Company that result from the acts or omissions of you under this Agreement. The Company agrees to indemnify and hold you harmless from all claims, losses, expenses, fees, including reasonable attorneys' fees, costs and judgments, that may be asserted against you that relate to the Company except such claims, losses, expenses and fees that result from your acts or omissions under this Agreement.

13. **Governing Law; Jurisdiction.** This Agreement shall be interpreted and construed in accordance with the laws of the State of North Carolina, excluding that body of law known as choice of law. All disputes with respect to this Agreement shall be brought and heard either in the North Carolina state courts located in Orange County, North Carolina, or the federal district court for the Eastern District of North Carolina located in Raleigh, North Carolina. The parties to this Agreement each consent to the in personam jurisdiction and venue of such courts. The parties agree that service of process upon them in any such action may be made if delivered in person, by courier service, by telegram, by telefacsimile or by first class mail, and shall be deemed effectively given upon receipt.

14. **Entire Agreement.** This Agreement is the entire agreement between the parties regarding the subject matter hereof and there are no other promises or conditions in any other agreement whether oral or written. This Agreement supersedes any prior consulting or other agreements with respect to the subject matter hereof between you and the Company.

15. Assignment. This Agreement shall be for the benefit of, and shall be binding upon, the successors and assigns of the parties hereto. You agree not to assign this Agreement without the prior written consent of the Company.

(NEXT PAGE IS SIGNATURE PAGE)

If this Agreement is satisfactory, please indicate your acceptance of these terms by your signature below.

Very truly yours,

G1 THERAPEUTICS, INC.

By: /s/ Mark Velleca  
Name: Mark Velleca, MD, PhD  
Title: Chief Executive Officer

AGREED AND ACCEPTED:

Seth Rudnick, M.D.  
(Typed or printed name)

/s/ Seth Rudnick  
(Signature)

EXHIBIT A

Advisor's Responsibilities – SAB

As a member of the Company's Scientific Advisory Board, Seth Rudnick (the "Advisor") will make best efforts to:

1. Attend meetings of the Scientific Advisory Board expected to take place approximately twice per year.
2. Provide guidance and advice to the Company on scientific and technological matters and developments potentially relevant to the Company's business and areas of research and development and otherwise as either the Company or Advisor considers appropriate.
3. Develop, review and comment on the Company's strategies for research and development, product definition, regulatory approvals, business development and marketing, as well as its related presentations and materials.
4. Provide consulting services to the Company at its request, including a reasonable amount of informal consultation in person, over the telephone, by email, or otherwise as requested by the Company at times reasonably convenient to Advisor.
5. With the Company's approval in each instance, make introductions to individuals and corporations that might be of assistance to the Company.

EXHIBIT A-1

ADVISOR'S RESPONSIBILITIES - CAB

As a member of the Company's Clinical Advisory Board, Seth Rudnick (the "**Advisor**") will make best efforts to:

1. Attend all Clinical Advisory Board meetings.
2. Provide any material reasonably requested by the Company that is relevant to the Company's clinical development/testing plans and to which Advisor has reasonable access.
3. Review and comment on the Company's clinical development/testing plans.
4. Other services related to the Company's clinical development programs to be provided as appropriate and/or requested by the Company, in each case subject to a written addendum to this agreement setting forth the particular services and the compensation to be paid for such services.

**FIRST AMENDMENT TO OFFICE LEASE**

This First Amendment to Office Lease ("Amendment") is made effective as of January 27, 2016, by and between **RALEIGH RC GREEN, LLC**, a Delaware limited liability company ("Landlord") and **G1 THERAPEUTICS, INC.**, a Delaware corporation ("Tenant") with reference to the following facts and circumstances.

- A. Landlord is the owner of that certain building located at 4401 Research Commons, 79 TW Alexander Drive, Research Triangle, NC 27709 (the "Original Building").
- B. Highwoods Realty Limited Partnership, predecessor in interest to Landlord, and Tenant entered into that certain Office Lease dated January 10, 2014 (the "Lease") for certain premises containing approximately 4,047 rentable square feet (the "Original Premises") located in the Original Building.
- C. Landlord and Tenant desire to amend the Lease upon terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing facts and circumstances, the mutual covenants and promises contained herein and after good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties, the parties do hereby agree to the following:

1. **Definitions.** Each capitalized term used in this Amendment shall have the same meaning as is ascribed to such capitalized term in the Lease, unless otherwise provided for herein.

2. **Premises.** Effective as of the date of substantial completion of the Tenant Work in accordance with and as such term is defined in the work letter attached hereto as Exhibit A (the "Relocation Date"), the Premises shall be relocated to those certain premises containing approximately 9,766 rentable square feet, as shown on Exhibit B, attached hereto (the "New Premises") in Suite 100 on the first floor of that certain building owned by Landlord located at 4501 Research Commons, 79 TW Alexander Drive, Research Triangle, NC 27709 and containing approximately 58,996 rentable square feet (the "New Building"). Subject to Tenant Delay (as such term is defined in the work letter attached hereto as Exhibit A and delays caused by events of force majeure, the Landlord shall use commercially reasonable efforts to substantially complete the Tenant Work no later than June 15, 2016 (the "Target Relocation Date"). In the event Landlord fails to substantially complete the Tenant Work and deliver the New Premises to Tenant on or before the date which is one hundred twenty (120) days following the Target Relocation Date and such delay was not caused by a Tenant Delay or an event of force majeure, the Tenant may, as its sole and exclusive remedy, terminate this Lease with thirty (30) days written notice to Landlord given prior to the Relocation Date; provided that if Landlord shall deliver possession after delivery of such notice, but before the expiration of such thirty (30) day period, the termination shall be null and void and this Lease shall continue in full force and effect. Tenant shall surrender the Original Premises in the condition required under the Lease no later than fifteen (15) business days after the Relocation Date. From and after the Relocation Date (i) the term Premises shall mean and refer to the New Premises, unless the context requires otherwise, and (ii) the term Building shall mean and refer to the New Building unless the context requires otherwise.

3. Term. The term of the Lease is hereby extended for a term commencing on August 1, 2017 and ending on December 31, 2022 (the "Extended Term"). Except as expressly provided in Section 8 below, Tenant shall have no option to renew the Lease following the Extended Term and as of the full execution of this Amendment, the renewal option set forth in the Addendum Number Three to the Lease is hereby deleted and of no further force and effect.

4. Base Rent.

a. From and after the Relocation Date, Base Rent shall be as follows:

<u>Months</u>	<u>Monthly Installment</u>	<u>Annual</u>
Relocation Date- Month 12*	\$ 16,276.66**	\$195,320.00
Month 13-Month 24	\$ 16,764.96	\$201,179.60
Month 25-Month 36	\$ 17,267.91	\$207,214.98
Month 37-Month 48	\$ 17,785.95	\$213,431.42
Month 49-Month 60	\$ 18,319.53	\$219,834.36
Month 61-Month 72	\$ 18,869.11	\$226,429.39
Month 73-December 31, 2022	\$ 19,435.18	\$233,222.27

\* As used in this Section 4 the word "Month" followed by a number shall mean that number of months following the Relocation Date.

\*\* Provided that Tenant is not in default under the Lease beyond applicable notice and cure periods, Landlord agrees to abate \$8,138.33 of Tenant's obligation to pay Base Rent per month for the first eight (8) months following the Relocation Date (the "Conditional Rent"). Upon the occurrence of a default at any time during the term of the Lease, which results in Landlord terminating the Lease, in addition to any other remedies to which Landlord may be entitled, Landlord shall be entitled to recover the Conditional Rent (i.e., the Conditional Rent shall not be deemed to have been abated, but shall become immediately due and payable as unpaid Rent earned, but due at the time of such default).

5. Additional Rent - Operating Expenses and Taxes. The following amendments shall be made to the Addendum Number Two of the Lease ("Addendum Number Two"):

a. Tenant's Proportionate Share. Effective as of the Relocation Date and only as it relates to the period from and after such date, the term "Tenant's Proportionate Share" as defined in Section 5 of the Addendum Number Two shall be 16.55%.



b. Base Year for Operating Expenses. Effective as of the Relocation Date and only as it relates to the period from and after such date, the term "Base Year" as defined in Section 6 of the Addendum Number Two shall be the calendar year 2016.

c. Base Year for Taxes. Effective as of the Relocation Date and only as it relates to the period from and after such date, the term "Base Year" as defined in Section 7 of the Addendum Number Two shall mean the real property tax year 2016.

d. Payment of Additional Rent. Effective as of the Relocation Date and only as it relates to the period from and after such date, the phrase "eight percent (8%) per annum" in Section 8.c. of the Addendum Number Two shall be deleted and replaced with the phrase "six percent (6%) per annum".

6. Parking. Effective as of the Relocation Date, Section 1.k. of the Lease is hereby deleted and of no further force and effect and Tenant shall be entitled to thirty-seven (37) parking spaces at the New Building on a non-exclusive, unreserved basis in common with other tenants of the New Building.

7. Signage. For the New Premises, Landlord will furnish building standard identification signage on the interior Building directory, if applicable, and on or beside the main entrance door to the Premises.

8. Renewal Option. Tenant shall have a personal and non-transferable option to renew the term of the Lease for one (1) term of five (5) years. Such renewal term shall begin the first day following the expiration of the Extended Term. Tenant shall have the right to exercise the renewal option conferred herein by giving Landlord notice at least three hundred sixty-five (365) days prior to the expiration of the Extended Term; provided that, at the time of exercise and as of the commencement of the renewal term (a) Tenant is not then in default beyond any applicable notice and cure period; and (b) Tenant has not sublet or assigned any portion of the Premises, other than an assignment of sublease which does not require Landlord's consent pursuant to Section 17(a) of the Lease (a "Permitted Transfer").

The renewal option shall be subject to all of the terms and conditions contained in the Lease, except that Base Rent during the renewal term shall be at Market Rent. "Market Rent" shall be the anticipated rate in effect for the Premises as of the commencement of the renewal term, together with any market rate increases during the renewal term, based upon the rents generally in effect for renewed leases of space in the area in which the Building is located of equivalent quality, size, utility and location, and taking into account the length of the renewal term and the credit standing of Tenant. Landlord shall lease the Premises to Tenant in their then-current condition, and Landlord shall not provide to Tenant any allowances (e.g., moving allowance, construction allowance, free rent or the like) or other tenant inducements. In the event that Tenant shall exercise an option to renew the Lease, then the Market Rent shall be agreed upon in a meeting of the parties hereto held at least ninety (90) days prior to the expiration of the Extended Term. If the parties are able to agree on an amount of Market Rent that is mutually satisfactory, then such agreements shall be placed in writing and shall be signed by the parties hereto and shall thereupon become a part of the Lease.

If the parties hereto are unable to agree upon the Market Rent at least thirty (30) days prior to the commencement of the renewal term, then the disagreement shall be promptly submitted to arbitration. In such event, each party shall select an arbitrator having not less than ten (10) years' actual experience in the commercial real estate brokerage business, and the arbitrators so selected shall immediately meet for the purpose of hearing and deciding the dispute and fixing the relevant rate of rent. If the two arbitrators selected agree on Market Rent, their decision shall be binding on both parties. If the two arbitrators selected cannot agree on the Market Rent within ten (10) business days after appointment (the "Initial Review Period"), but the rates differ by less than five percent (5%), the Market Rent shall be the average of the two rates. If the rates differ by more than five percent (5%), no later than five (5) business days following the expiration of the Initial Review Period, the two arbitrators shall select a third arbitrator with qualifications similar to their own. Within ten (10) business days following appointment, the third arbitrator shall select one of the two rental rates promulgated by the first two arbitrators as the Market Rent. If the arbitrators cannot agree on the third arbitrator, they shall petition the presiding judge of the local state court having jurisdiction to appoint such arbitrator to act as an umpire between the arbitrators selected by Landlord and Tenant. The decision of the third arbitrator or presiding judge, as the case may be, shall be binding on both parties. Landlord and Tenant shall each be responsible to pay their respective arbitrators and will share equally the cost of the third arbitrator.

Failure of Tenant to properly exercise the option herein granted shall be construed as a waiver of such option, and the Lease shall then terminate at the expiration of the Extended Term.

#### 9. Right of First Refusal.

Effective as of the date of full execution of this Amendment, Section 30(b) of the Lease is hereby deleted and of no further force and effect.

Provided that at the time of exercise Tenant is not then in default beyond any applicable notice and cure periods, Tenant shall have a one time right of first refusal with respect to any space on the first floor of the New Building that may become available (the "Refusal Space"), subject to the terms and conditions set forth below, before such space is leased to any third party, and provided at least three (3) years remain under the Extended Term of the Lease (or if less than three (3) years remain under the Extended Term, Tenant exercises the renewal option set forth in Section 8 above and thereafter at least three (3) years remain on the term of the Lease).

The foregoing right shall be subject to the existing tenants' or occupants' of the Refusal Space renewing their existing leases, whether pursuant to an option to extend previously granted or otherwise, and in all events is subject and subordinate to any existing rights of any other parties to lease the Refusal Space, if such existing rights have already been granted prior to the date of this Amendment (collectively "Prior Optionees").

In the event any bona fide third party (a "Potential Tenant") expresses interest in leasing all or any portion of the Refusal Space during the term of the Lease ("Third Party Interest"), and no Prior Optionee exercises its right of refusal, Landlord shall offer the applicable portion of the Refusal Space to Tenant upon the same terms, covenants and conditions as provided in the Lease for the Premises, except that, if Tenant exercises this right of first refusal after the first

anniversary of the Relocation Date (a) the Base Rent, Tenant's payment of expenses, and the tenant improvement allowance (subject to adjustment as provided herein) and other economic terms shall be the same as the terms included in the offer for the Refusal Space from the Potential Tenant that was acceptable to Landlord (the "Offer"); and (b) the parties shall negotiate a work letter addressing the procedure for preparation and approval of the plans for any tenant improvements in the Refusal Space, as well as the construction thereof. If the Offer is for a longer period than remaining under the Lease, the term of the lease of the Refusal Space shall be co-terminous with the term of the Lease, and the Base Rent rates, tenant improvement allowances and other concessions set forth in the Offer shall be adjusted, as Landlord shall determine, to reflect any lesser term remaining under the term of the Lease. Except for the tenant allowance contained in the Offer and as otherwise mutually agreed by the parties, Tenant shall accept the Refusal Space "As-Is," and Tenant shall have no further rights with respect to the Refusal Space. For avoidance of doubt, if Tenant exercises this Right of First Refusal, Tenant shall be required to lease the entire space referred to in the Offer, not just the portion thereof which is part of the Refusal Space, unless Landlord elects, in its sole and absolute discretion, to only lease Tenant the portion thereof located within the Refusal Space. If Tenant exercises this Right of First Refusal prior to the first anniversary of the Relocation Date, Base Rent, payment of expenses, and the tenant improvement allowance (subject to adjustment as provided herein) and other economic terms shall be the same as the terms included in this Amendment for the New Premises, provided that Landlord shall have the right to prorate the amount of any tenant inducement to take into account the remaining term of the Lease as compared to the remaining term of the Lease as of the date of full execution of this Amendment.

If Tenant notifies Landlord in writing of the acceptance of such offer within five (5) days after Landlord has delivered the Offer to Tenant, Landlord and Tenant shall enter into a written agreement modifying and supplementing the Lease and specifying that such Refusal Space accepted by Tenant is a part of the Premises, and containing other appropriate terms and conditions relating to the addition of the Refusal Space to the Lease (including specifically any increase or adjustment of the rent as a result of such addition). If Tenant exercises the right to lease the Refusal Space, said lease and the rent on the Refusal Space shall commence the later of thirty (30) days after Tenant's notice exercising the right, or the date the Refusal Space is delivered to Tenant, and shall continue for the duration of the term of the Lease.

If Tenant does not notify Landlord in writing of its acceptance of such offer in such five (5) day period, Landlord shall thereafter be able to lease the applicable portion of the Refusal Space to the Potential Tenant upon such terms and conditions as Landlord may determine and Tenant shall have no further right in the Refusal Space.

Any termination of the Lease shall terminate all rights of Tenant with respect to the Refusal Space. The rights of Tenant with respect to the Refusal Space shall not be severable from the Lease, nor may such rights be assigned or otherwise conveyed in connection with any permitted assignment of the Lease. Landlord's consent to any assignment of the Lease shall not be construed as allowing an assignment or a conveyance of such rights to any assignee. Nothing herein contained should be construed so as to limit or abridge Landlord's ability to deal with the Refusal Space or to lease the Refusal Space to other tenants, Landlord's sole obligation being a one time obligation to offer, and if such offer is accepted, to deliver the Refusal Space to Tenant in accordance with this provision.

The Lease shall not be void or voidable, nor shall Landlord be liable to Tenant for any loss or damage resulting from any delay in delivering possession of the Refusal Space to Tenant, but abatement of the Base Rent attributable to the Refusal Space from the date of Tenant's acceptance of the Offer with respect to the Refusal Space to the date of actual delivery of the Refusal Space, shall constitute full settlement of all claims that Tenant might have against Landlord by reason of the Refusal Space not being delivered upon the date of Tenant's acceptance of Landlord's offer.

If the Lease or Tenant's right to possession of the Premises shall terminate in any manner whatsoever before Tenant shall exercise the right herein provided, or if Tenant shall have subleased the Premises or assigned the Lease with respect to all or any portion of the Premises (other than a Permitted Transfer), then immediately upon such termination, sublease, or assignment, the right herein granted shall simultaneously terminate and become null and void. Such right is personal to Tenant and non-transferable (other than in connection with a Permitted Transfer). UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE ASSIGNEE UNDER A COMPLETE OR PARTIAL ASSIGNMENT OF THE LEASE (OTHER THAN A PERMITTED TRANSFER), OR A SUBTENANT UNDER A SUBLEASE OF THE PREMISES, HAVE ANY RIGHT TO EXERCISE THE RIGHT GRANTED HEREIN.

10. Temporary Space. Upon the date of full execution of this Amendment, Landlord shall allow Tenant to occupy Suite 290 in the Original Building containing approximately 3,073 rentable square feet, as shown on Exhibit C, attached hereto (the "Temporary Space") until the date which is fifteen (15) business days following Substantial Completion of the Tenant Work (as defined in Exhibit A). Such occupancy shall be upon all of the terms and conditions of the Lease, except for the following:

a. Tenant shall not be required to pay Base Rent attributable to the Temporary Space but instead shall pay a monthly gross rent for the Temporary Space only of \$1,536.50.

b. Tenant shall occupy the Temporary Space on an "as is where is" basis. Tenant shall not have the right to make any alterations to the Temporary Space except that Tenant shall have the right to remove and replace interior signage in the Temporary Space and the right to install Tenant's wiring, telecommunications and data cabling within the Temporary Space.

11. Security Deposit. Upon Tenant's execution of this Amendment, Tenant shall deposit with Landlord the additional sum of Nine Thousand Eight Hundred Eighty Five and 77/100 Dollars (\$9,885.77) which amount shall be part of the Security Deposit, as such term is defined in the Lease.

12. Alterations. As of the date of full execution of this Amendment, the following sentence shall be added to the end of Section 8(d) of the Lease:

"Notwithstanding the foregoing, Tenant may make non-structural alterations to the Premises not to exceed Fifteen Thousand and No/100 Dollars (\$15,000.00) in any twelve (12) month period without the prior written consent of Landlord."

13. Landlord Representations and Warranties. Landlord hereby represents and warrants that, to Landlord's actual knowledge as of the date full execution of this Amendment, the Landlord representations and warranties set forth in Section 31 of the Lease are true and correct as to the New Premises and are hereby fully restated as to the New Premises, except the representation set forth in Section 31(iii) of the Lease, which is not restated and Landlord shall not be deemed to have made any representation with regard the matters addressed by such Section 31(iii).

14. Broker. Each party represents to the other that except for Cushman & Wakefield representing Tenant and CBRE, Inc. representing the Landlord (collectively, the "Brokers"), neither party has dealt with any real estate broker, salesperson or finder in connection with this Amendment, and no other such person initiated or participated in the negotiation of this Amendment or is entitled to any commission in connection herewith. Each party hereby agrees to indemnify, defend and hold the other, its property manager and their respective employees harmless from and against any and all liabilities, claims, demands, actions, damages, costs and expenses (including attorneys fees) arising from either (a) a claim for a fee or commission made by any broker, other than the Brokers, claiming to have acted by or on behalf of the indemnifying party in connection with this Amendment, or (b) a claim of, or right to lien under the statutes of the state in which the Premises are located relating to real estate broker liens with respect to any such broker retained by the indemnifying party.

15. Submission. Submission of this Amendment by Landlord to Tenant for examination and/or execution shall not in any manner bind Landlord or Tenant and no obligations on Landlord or Tenant shall arise under this Amendment unless and until this Amendment is fully signed and delivered by Landlord and Tenant.

16. Miscellaneous.

a. Time of Essence. Time is of the essence of this Amendment and each and every term and provision hereof.

b. Modification. A modification of any provision herein contained, or any other amendment to this Amendment, shall be effective only if the modification or amendment is in writing and signed by both Landlord and Tenant.

c. Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

d. Number and Gender. As used in this Amendment, the neuter includes masculine and feminine, and the singular includes the plural.

e. Construction. Headings at the beginning of each Section and subsection are solely for the convenience of the parties and are not a part of this Amendment. Except as otherwise provided in this Amendment, all exhibits referred to herein are attached hereto and are incorporated herein by this reference. Unless otherwise indicated, all references herein to Articles, Section, subsections, paragraphs, subparagraphs or provisions are to those in this Amendment. Any reference to a paragraph or Section

herein includes all subparagraphs or subsections thereof. This Amendment shall not be construed as if it had been prepared by only Landlord or Tenant, but rather as if both Landlord and Tenant had prepared the same. In the event any portion of this Amendment shall be declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, such portion shall be deemed severed from this Amendment, and the remaining parts hereof shall remain in full force and effect, as fully as though such invalid, illegal or unenforceable portion had never been part of this Amendment.

f. Integration of Other Agreements. This Amendment, the Lease and prior amendments set forth the entire agreement and understanding of the parties with respect to the matters set forth herein and supersedes all previous written or oral understandings, agreements, contracts, correspondence and documentation with respect thereto. Any oral representation or modifications concerning this Amendment shall be of no force or effect.

g. Duplicate Originals; Counterparts. This Amendment may be executed in any number of duplicate originals, all of which shall be of equal legal force and effect. Additionally, this Amendment may be executed in counterparts, but shall become effective only after a counterpart hereof has been executed by each party; all said counterparts shall, when taken together, constitute the entire single agreement between parties.

h. No Waiver. No failure or delay of either party in the exercise of any right given to such party hereunder shall constitute a waiver thereof unless the time specified herein for exercise of such right has expired, nor shall any single or partial exercise of any right preclude other or further exercise thereof or of any other right. No waiver by any party hereto of any breach or default shall be considered to be a waiver of any other breach or default. The waiver of any condition shall not constitute a waiver of any breach or default with respect to any covenant, representation or warranty.

i. Further Assurances. Landlord and Tenant each agree to execute any and all other documents and to take any further actions reasonably necessary to consummate the transactions contemplated hereby.

j. No Third Party Beneficiaries. Except as otherwise provided herein, no person or entity shall be deemed to be a third party beneficiary hereof, and nothing in this Amendment, (either expressed or implied) is intended to confer upon any person or entity, other than Landlord and/or Tenant (and their respective nominees, successors and assigns), any rights, remedies, obligations or liabilities under or by reason of this Amendment.

k. Full Force and Effect. The Lease, as amended hereby, shall continue in full force and effect, subject to the terms and provisions thereof and hereof. In the event of any conflict between the terms of the Lease and the terms of this Amendment, the terms of this Amendment shall control.

IN WITNESS WHEREOF, this Amendment is executed as of the day and year aforesaid.

LANDLORD:

**RALEIGH GREEN, LLC**

By: /s/ Barry P. Marcus  
Barry P. Marcus, Senior Vice President

Date: 1/28/2016

TENANT:

**G1 THERAPEUTICS, INC.**

By: /s/ Mark Velleca  
Printed Name: Mark Velleca

Title: CEO

Date: 1/27/2016

**EXHIBIT A  
WORK LETTER**

This Work Letter (this "Work Letter") is attached to and made a part of that certain First Amendment to Office Lease (the "Amendment"), between **RALEIGH RC GREEN, LLC** ("Landlord") and **G1 THERAPEUTICS, INC.**, ("Tenant"). The terms used in this Work Letter that are defined in the Amendment shall have the same meanings as provided in the Amendment.

**1. General.**

1.1 Purpose. This Agreement sets forth the terms and conditions governing the design, permitting and construction of the tenant improvements ("Tenant Work") to be installed in the New Premises.

1.2 Tenant's Representative. Tenant acknowledges that Tenant has appointed Jen Moses as its authorized representative ("Tenant's Representative") with full power and authority to bind Tenant for all actions taken with regard to the Tenant Work. Tenant hereby ratifies all actions and decisions with regard to the Tenant Work that the Tenant's Representative may have taken or made prior to the execution of this Work Letter. Landlord shall not be obligated to respond to or act upon any plan, drawing, change order or approval or other matter relating to the Tenant Work until it has been executed by Tenant's Representative or a senior officer of Tenant. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's general contractor with respect to the Tenant Work, unless otherwise agreed to in writing by Landlord.

**2. Tenant Work**. Subject to the provisions of this Work Letter, Landlord shall construct the Tenant Work in the New Premises using building standard materials and finishes substantially in accordance with the plans and specifications which are attached hereto and made a part hereof as Exhibit A-1 (the "Plans and Specifications").

**3. Responsibility and Payment.**

3.1 Payments by Landlord. Subject to Tenant's obligations under Section 3.2 below, Landlord shall be responsible for the cost of preparing the Plans and for the cost of performing the Tenant Work as shown on the Plans, except those items which are Tenant's responsibility pursuant to Sections 3.2 and 4, below.

3.2 Payments by Tenant. Tenant shall contribute the sum Twenty Thousand Seven Hundred Twelve dollars and 50/100 (\$20,712.50) toward the cost of the Tenant Work. Such amount shall be paid to Landlord 50% upon the date of Tenant's execution of this Amendment and 50% on the Relocation Date.

**4. Construction.**

4.1 Responsibility for Construction. Landlord shall administer the construction of the Tenant Work in accordance with the Plans and any change orders approved pursuant to this Work Letter. All Tenant Work shall be constructed by Landlord's general contractor with the exception of those items constructed by Tenant's contractor or vendor which shall be limited to telephone equipment and specialized office equipment wiring, which shall be performed at Tenant's sole cost and expense, in good workman-like manner in compliance with all applicable laws and pursuant to plans approved by Landlord, and, shall, at Landlord's option, be performed under the supervision of Landlord or its contractor (or subcontractor).



4.2 **Change Orders.** If Tenant requests any change or addition to the work or materials to be provided by Landlord pursuant to this Work Letter, Landlord shall respond to Tenant's request for consent as soon as practicable, using commercially reasonable efforts to respond within five (5) business days after the request being made. If Landlord approves such request, Landlord shall as soon as practicable after such approval notify Tenant of the increase in amounts due as a result of such change order, including but not limited to any plan preparation and revisions, permitting and/or repermitting and any work, materials and other services, and the delay in substantial completion of the New Premises, if any, due to the change order which would be Tenant's sole responsibility. The increase in amounts due as a result of any proposed change order shall include all amounts due that were included in the original budget as provided in this Work Letter. The net incremental increase in costs attributable to any change order requested by Tenant and approved by Landlord shall be payable to Landlord by Tenant upon approval by Tenant of the change order cost and/or delay, if any.

## **5. Substantial Completion.**

5.1 **General.** Landlord shall substantially complete (as defined below) the Tenant Work in accordance with the Plans and Specifications, but neither the validity of this Amendment or the Lease nor the obligations of Tenant under this Amendment or the Lease shall be affected by a failure to Substantially Complete the New Premises by a certain date, and Tenant shall have no claim against Landlord because of Landlord's failure to Substantially Complete the New Premises on a certain date other than as provided in this Amendment.

5.2 **Substantial Completion.** "Substantial Completion" of the New Premises shall be conclusively deemed to have occurred as soon as the Tenant Work to be installed by Landlord pursuant to this Work Letter has been constructed in accordance with the Plans and approved change orders. The issuance of a temporary certificate of occupancy by the proper governmental entity shall not be required for Substantial Completion but, if granted, shall be deemed conclusive evidence that Substantial Completion has occurred. Notwithstanding the above, the New Premises shall be considered Substantially Complete and ready to be utilized for their intended purpose even though (a) there remain to be completed in the New Premises punch list items that will not materially interfere with Tenant's permitted use of the New Premises, and/or (b) there is a delay in the Substantial Completion of the New Premises due to a "Tenant Delay" as defined below.

5.3 **Tenant Delays.** A Tenant's Delay shall mean a delay caused directly or indirectly by any of the following: (a) Tenant's failure to comply with any of the deadlines specified in this Work Letter; (b) Tenant's request for changes or additions to the Tenant Work, or failure to timely pay for the additional amounts due as a result of a change order requested by Tenant; (c) Tenant's failure to pay when due any amounts required pursuant to this Work Letter; (d) Tenant's request for changed materials, finishes or installations which are not available as needed to meet the general contractor's schedule for Substantial Completion; (e) Tenant's or Tenant's agent, including Tenant's contractors, vendors, and Representative's interference with the general contractor's schedule; (f) the performance or completion of any work, labor or services by a party employed by Tenant; or (g) any other Tenant-caused delay. In the event of a Tenant's Delay, the Relocation Date and the payment of Base Rent for the New Premises shall be accelerated by the number of days of such delay and notwithstanding anything to the contrary stated in this Amendment or the Lease, the Relocation Date shall commence on the date the New Premises would have been delivered to Tenant but for such Tenant's Delay.

5.4 Punch List. Landlord and Tenant shall prepare and agree on a “punch list” which shall specify the items of work that require correction, repair or replacement. Landlord agrees to correct and complete any such items outlined in the punch list as soon as practicable, using commercially reasonable efforts to have all such items completed within thirty (30) days after Tenant’s occupancy of the New Premises.

5.5 Possession. Tenant, by taking possession of the New Premises, agrees that Landlord has satisfactorily performed all work to be performed by it as hereinabove set forth, subject to the punch list items as may be agreed to by Landlord and Tenant.

THE PLANS AND SPECIFICATIONS

03 Therapeutics F2-up 4501 Research Commons		Budget Summary and Bid Review Form								
		RILEY LEWIS GC		SPECTRA Builders Inc		Vision Contractors Incorporated		D		
		Budget Pricing	Final Pricing	Budget Pricing	Final Pricing	Budget Pricing	Final Pricing	Budget Pricing	Final Pricing	
01000	GENERAL CONDITIONS	\$24,205.00	\$0.00	\$24,440.00	\$0.00	\$13,945.00	\$0.00	\$0.00	\$0.00	
01300	TEMPORARY UTILITIES	\$2,000.00	\$0.00	n/a	\$0.00	\$450.00	\$0.00	\$0.00	\$0.00	
01400	CLEANING & PROTECTION	\$4,076.00	\$0.00	\$2,360.00	\$0.00	\$1,795.00	\$0.00	\$0.00	\$0.00	
02000	DEMOLITION	\$2,344.00	\$0.00	\$2,500.00	\$0.00	\$5,022.00	\$0.00	\$0.00	\$0.00	
02200	SITEWORK	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
02300	CONCRETE	\$3,250.00	\$0.00	\$3,400.00	\$0.00	\$2,834.00	\$0.00	\$0.00	\$0.00	
02500	METALS	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
02500	STRUCTURAL STEEL	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
02100	ROUGH CARPENTRY	\$985.00	\$0.00	\$250.00	\$0.00	\$684.00	\$0.00	\$0.00	\$0.00	
02300	CABINETRY	\$15,891.50	\$0.00	\$22,129.00	\$0.00	\$45,650.00	\$0.00	\$0.00	\$0.00	
07200	INSULATION	\$4,240.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
07290	FIRE PROOFING	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
07700	ROOFING	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
08200	DOORS/FRAMES/HARDWARE	\$14,409.00	\$0.00	\$14,007.00	\$0.00	\$12,757.00	\$0.00	\$0.00	\$0.00	
08800	GLASS & GLAZING	\$5,575.00	\$0.00	\$2,150.00	\$0.00	\$5,800.00	\$0.00	\$0.00	\$0.00	
08250	DRYWALL/METAL STUDS	\$24,659.00	\$0.00	\$27,769.00	\$0.00	\$39,500.00	\$0.00	\$0.00	\$0.00	
06600	ADDITIONAL CEILING	\$6,153.00	\$0.00	\$7,900.00	\$0.00	\$6,200.00	\$0.00	\$0.00	\$0.00	
09000	CERAMIC TILE / STONE	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
09680	FLOOR COVERING & BASE	\$26,965.00	\$0.00	\$27,405.00	\$0.00	\$26,705.00	\$0.00	\$0.00	\$0.00	
09600	PAINT & WALLCOVERING	\$5,565.00	\$0.00	\$9,740.00	\$0.00	\$4,000.00	\$0.00	\$0.00	\$0.00	
10000	MISC. & SPECIAL ITEMS	\$1,050.00	\$0.00	\$912.00	\$0.00	\$1,956.00	\$0.00	\$0.00	\$0.00	
10800	TOILET PARTITIONS & ACCESS	\$0.00	\$0.00	n/a	\$0.00	\$590.00	\$0.00	\$0.00	\$0.00	
11450	APPLIANCES	\$3,150.00	\$0.00	\$3,150.00	\$0.00	\$3,150.00	\$0.00	\$0.00	\$0.00	
12000	WINDOW COVERINGS	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
14000	ELEVATOR MODIFICATION	\$0.00	\$0.00	n/a	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
15300	FIRE PROTECTION	\$15,495.00	\$0.00	\$11,207.00	\$0.00	\$12,000.00	\$0.00	\$0.00	\$0.00	
15400	PLUMBING	\$26,216.00	\$0.00	\$8,550.00	\$0.00	\$26,766.00	\$0.00	\$0.00	\$0.00	
18000	HVAC	\$18,563.00	\$0.00	\$28,200.00	\$0.00	\$18,563.00	\$0.00	\$0.00	\$0.00	
18000	ELECTRICAL	\$65,978.00	\$0.00	\$58,700.00	\$0.00	\$72,450.00	\$0.00	\$0.00	\$0.00	
17000	FIRE LIFE SAFETY	\$9,752.00	\$0.00	\$7,425.00	\$0.00	\$9,900.00	\$0.00	\$0.00	\$0.00	
18000	OVERHEAD & PROFIT (or lump sum)	\$14,796.00	\$0.00	\$23,000.00	\$0.00	\$20,923.00	\$0.00	\$0.00	\$0.00	
	TOTALS BASE BIDS:	\$328,796.50	\$0.00	\$284,994.00	\$0.00	\$347,500.00	\$0.00	\$0.00	\$0.00	
	<b>Add/Alternate Pricing (not included above)</b>									
AA#1	SHEET VINYL IN LIEU OF VCT	\$8,453.00	\$0.00	\$9,130.00	\$0.00	\$7,653.00	\$0.00	\$0.00	\$0.00	
AA#2	UPPER CABINETS	\$8,294.00	\$0.00	\$8,402.00	\$0.00	\$8,000.00	\$0.00	\$0.00	\$0.00	
AA#3	2 EXHAUST FANS FOR LAB (THROUGH SITE)	\$10,750.00	\$0.00	\$17,540.00	\$0.00	\$7,700.00	\$0.00	\$0.00	\$0.00	
AA#4	FB in addit #4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
AA#5	FB in addit #5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
AA#6	FB in addit #6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
AA#7	FB in addit #7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
AA#8	FB in addit #8	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	TOTALS ADD/ALTERNATES:	\$26,997.00	\$0.00	\$35,072.00	\$0.00	\$23,353.00	\$0.00	\$0.00	\$0.00	
	<b>Hard Construction Cost:</b>		Budget pricing		Final pricing					
	Calculated Budget Average of Construction:		\$320,430.17		\$284,994.00				<FB in selected GC	
	<b>(Add/Alternates are not included)</b>									
	<b>Soft Cost / Allowances:</b>		Budget pricing		Final pricing					
	SP/Permit Set/Reimbursables Allowance		\$17,045.00		\$0.00					
	Lien Agent Fee		\$50.00		\$0.00					
	Locksmith Allowance		\$350.00		\$0.00					
	Building Permit Allowance		\$1,800.00		\$0.00					
	Moving Allowance		\$0.00		\$0.00					
	Low Voltage Cabling Allowance		\$0.00		\$0.00					
	MEP/FP Engineering Allowance		\$0.00		\$0.00					
	Project Management Fee		\$16,021.51		\$0.00					
	<b>Total Soft Cost:</b>		\$35,266.51		\$0.00					
	Contingency (5% of Hard Cost)		\$16,021.51		\$0.00					
	<b>Total Budget/Final Project Cost:</b>		\$371,718.18		\$0.00					
	<b>(Add/Alternates are not included)</b>									
	Cost per PSF		\$35.06		\$0.00					
	RF# 9756									

**Notes:**

This is Budget Pricing based on the Hager Smith 2 pages:  
D-1 Dated 11-2-15 and A-101 Dated 11-6-15

Work priced for Normal hours with the exception of core drilling, trenching, track shooting and fire alarm pre-testing.

Pricing Excludes: Phone / Data wiring, Security work, supplemental cooling of any kind for any IT room.

This is revised pricing based on recent changes made to the follow:  
Electrical: New Elec. Panel, New transformer to support new devices  
Cabinet Changes



EXHIBIT B

THE NEW PREMISES

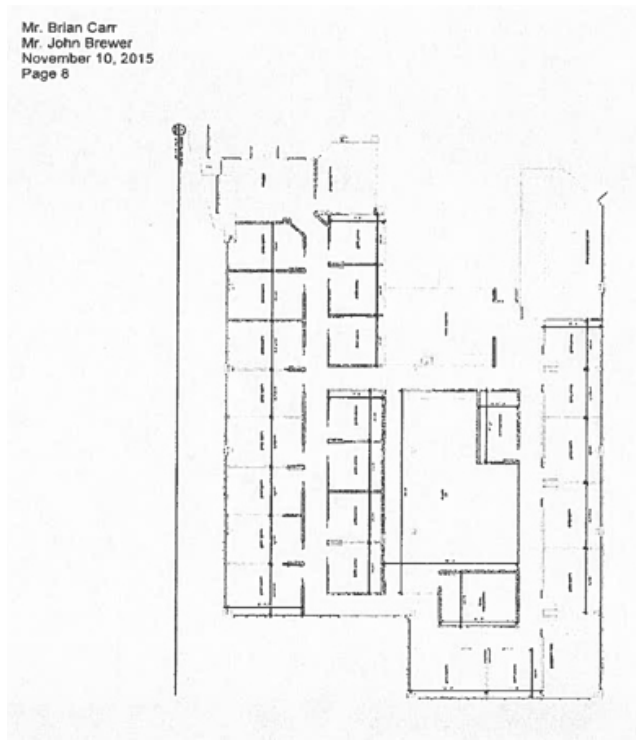
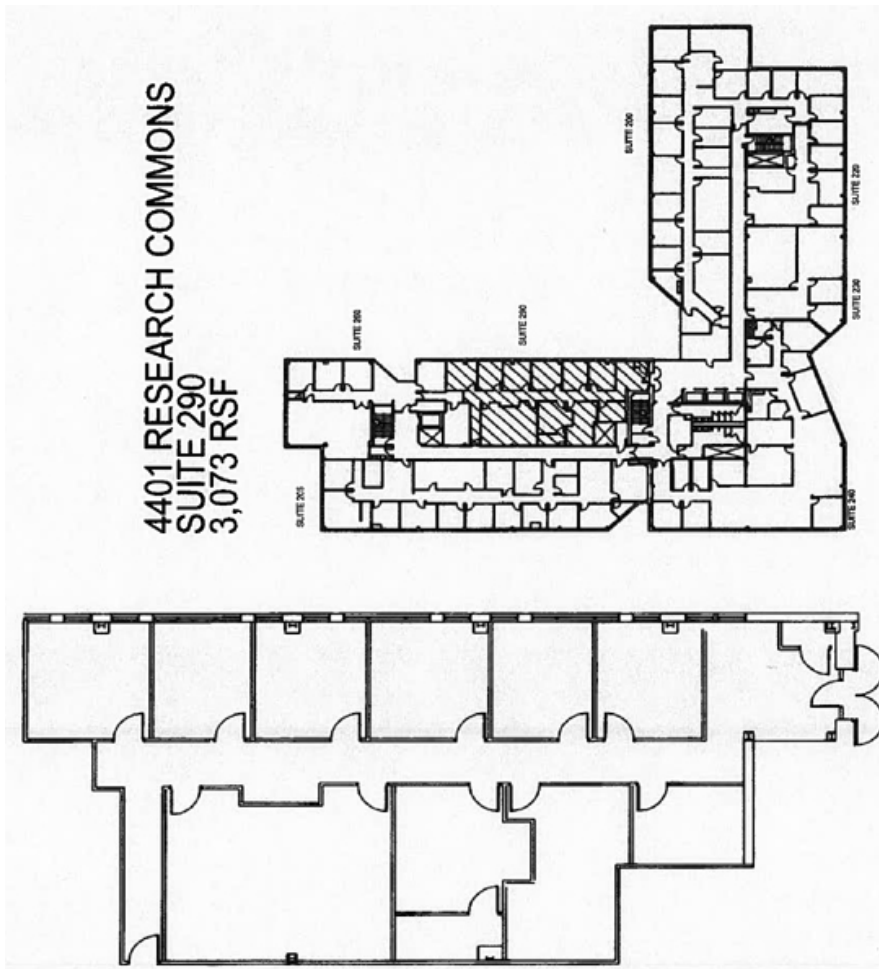


EXHIBIT C  
TEMPORARY SPACE



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**HIGHWOODS REALTY LIMITED PARTNERSHIP  
("LANDLORD")**

**G1 THERAPEUTICS, INC.  
("TENANT")**

**OFFICE LEASE**

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  - c. *No Abatement*
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- 22. **Multiple Defaults**
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- 29. **General Provisions/Definitions**
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- 30. **Special Conditions**
- 31. **Addenda and Exhibits**
  - a. *Lease Addendum Number One — "Work Letter"*
  - b. *Lease Addendum Number Two — "Additional Rent — Operating Expenses and Taxes"*
  - c. *Lease Addendum Number Three — "Option to Extend Lease Term"*

- d. Exhibit A — Premises
- e. Exhibit A-1— Refusal Space
- f. Exhibit B — Rules and Regulations
- g. Exhibit C — Commencement Agreement
- h. Exhibit D — Acceptance of Premises

**OFFICE LEASE**

**THIS OFFICE LEASE** ("Lease"), made this 18th day of January, 2014 by and between **HIGHWOODS REALTY LIMITED PARTNERSHIP**, a North Carolina limited partnership ("Landlord"), and **G1 THERAPEUTICS, INC.**, a Delaware corporation ("Tenant"), provides as follows:

**1. BASIC DEFINITIONS AND PROVISIONS.** The following basic definitions and provisions apply to this Lease:

- a. *Premises.*

Rentable Square Feet:	4,047
Suite:	105
Building:	4401 Research Commons
Office Park:	Research Commons
Street Address:	79 T.W. Alexander Drive
City/County:	Research Triangle Park/Durham
State/Zip Code:	North Carolina/27709
  
- b. *Term.*

Number of Months:	40 Full Calendar Months
Possession Date:	Effective Date
Commencement Date:	April 1, 2014
Rent Commencement Date:	August 1, 2014
Expiration Date:	July 31, 2017

c. *Lease Year.* The term "Lease Year" shall have the following meaning: the first Lease Year shall commence as of the Commencement Date and shall end on the last day of the 12<sup>th</sup> full month thereafter. If the Commencement Date is not the first day of a calendar month, the first Lease Year shall include the partial month that includes the Commencement Date and the 12 full months immediately following the partial month. Each successive Lease Year shall be the 12-month period commencing on the day immediately following the last day of the prior Lease Year except for any shorter period necessitated by the expiration or earlier termination of the Lease.

d. *Permitted Use.* General office use

e. *Occupancy Limitation.* Up to six (6) persons per one thousand (1,000) rentable square feet.

f. *Base Rent.* The minimum base rent for the Term is \$237,837.36, payable in monthly installments on the 1st day of each month in accordance with the following Base Rent Schedule:

<u>MONTHS</u>	<u>MONTHLY RENT</u>	<u>PERIOD RENT</u>
4/1/2014-7/31/2014	\$ 0.00	\$ 0.00
8/1/2014-3/31/2015	\$ 6,390.89	\$ 51,127.12
4/1/2015-3/31/2016	\$ 6,550.66	\$ 78,607.92
4/1/2016-3/31/2017	\$ 6,714.43	\$ 80,573.16
4/1/2017-7/31/2017	\$ 6,882.29	\$ 27,529.16
	<b>CUMULATIVE BASE RENT</b>	<b>\$ 237,837.36</b>

- g. *Rent Payment Address.* **HIGHWOODS REALTY LIMITED PARTNERSHIP**  
P.O. Box 409412  
Atlanta, Georgia 30384  
Tax ID #: 56-1869557
- h. *Security Deposit.* \$6,390.89
- i. *Business Hours.* 8:00 A.M. to 6:00 P.M. Monday through Friday and 9:00 A.M. to 1:00 P.M. Saturdays (excluding New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day).
- j. *After Hours HVAC Rate.* \$35.00 per hour, per zone, with a minimum of four (4) hours per occurrence provided Tenant has requested (during normal business hours) after hours HVAC at least twenty-four (24) hours in advance.
- k. *Parking.* Unreserved and nonexclusive at a ratio of 4 spaces per 1,000 rentable square feet.
- l. *Notice Addresses.*
- LANDLORD: **HIGHWOODS REALTY LIMITED PARTNERSHIP**  
c/o Highwoods Properties, Inc.  
3100 Smoketree Court, Suite 600  
Raleigh, North Carolina 27604  
Attn: Manager, Lease Administration and Legal Department

TENANT:

**G1 THERAPEUTICS, INC.**  
4401 Research Commons, Suite 105  
79 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
Attn: Mr. Tom Laundon  
Facsimile#: \_\_\_\_\_

m. *Broker.*

Synergy Commercial Advisors  
3005 Carrington Mill Boulevard, Suite 510  
Morrisville, North Carolina 27560  
Attn: Rich Harris

n. *Authorized Representative:*

Rich Harris

## 2. LEASED-PREMISES.

a. *Premises.* Landlord leases to Tenant and Tenant leases from Landlord the Premises identified in Section 1a and as more particularly shown on Exhibit A, attached hereto. The parties acknowledge that all square foot measurements are approximate and agree that the square footage figures in Section 1a shall be conclusive for all purposes with respect to this Lease.

b. *Common Areas.* Tenant shall have non-exclusive access to those portions of the Building not set aside for leasing to tenants or reserved for Landlord's exclusive use, including, but not limited to, entrances, hallways, lobbies, elevators, restrooms, walkways, parking areas and structures, and plazas, if any ("Common Areas"). Landlord has the exclusive right to (i) designate the Common Areas, (ii) change the designation of any Common Area and otherwise modify the Common Areas, and (iii) permit special use of the Common Areas, including temporary exclusive use for special occasions. Tenant shall not interfere with the rights of others to use the Common Areas. All use of the Common Areas shall be subject to any rules and regulations reasonably promulgated by Landlord. Landlord shall not interfere with Tenant's access to the Premises or cause any increase in Tenant's additional Rent obligation per Lease Addendum Number Tw (except to the extent such expense is also included in the calculation of Tenant's Base Year expenses.

## 3. TERM.

a. *Commencement and Expiration Dates.* The Lease Term commences on the Commencement Date and expires on the Expiration Date, as set forth in Section 1b. At Landlord's election, the Commencement Date and Expiration Date may be set forth in a Commencement Agreement similar to **Exhibit C**, attached hereto, to be prepared by Landlord and promptly executed by the parties.

b. *Delivery of Possession.* Unless otherwise specified in the Workletter attached as Lease Addendum Number One, "delivery of possession" of the Premises shall mean the earlier of: (i) the date Landlord has the Premises ready for occupancy by Tenant as evidenced by a certificate of occupancy issued by proper governmental authority and given to Tenant, or (ii) the date Landlord could have had the Premises ready had there been no delays attributable solely to

Tenant. Notwithstanding any provision in the Lease to the contrary, upon the execution of the Lease by both parties, Tenant may enter the Premises for the purpose of installing its furniture, fixtures and equipment and other related purposes (the "Early Entry Period"). All terms and conditions of the Lease shall apply during the Early Entry Period, except that Tenant shall have no obligation to pay Rent until the Commencement Date set forth in the Lease.

c. *Right to Occupy.* Prior to occupancy of the Premises, Tenant's Authorized Representative shall execute an Acceptance of Premises similar to **Exhibit D** attached hereto, to be prepared by Landlord and executed by the parties. Tenant shall not occupy the Premises until Tenant has complied with all of the following requirements to the extent applicable under the terms of this Lease: (i) delivery of all certificates of insurance, (ii) payment of any required Security Deposit, (iii) intentionally deleted, (iv) if Tenant is an entity, receipt of resolutions depicting the authority of the party/individual signing on behalf of Tenant. Tenant's failure to comply with these (or any other conditions precedent to occupancy under the terms of this Lease) shall not delay the Commencement Date.

#### 4. USE.

a. *Permitted Use.* The Premises may be used only for general office and lab purposes in connection with Tenant's Permitted Use as defined in Section 1d and in accordance with the Occupancy Limitation as set forth in Section 1e. Tenant shall not use the Premises:

i. In violation of any restrictive covenants which apply to the Premises;

ii. In any manner that constitutes a nuisance or trespass or disturb other tenants in the Building or Office Park, as applicable;

iii. In any manner which increases any insurance premiums, or makes such insurance unavailable to Landlord on the Building; provided that, in the event of an increase in Landlord's insurance premiums which results solely from Tenant's use of the Premises, Landlord may elect to permit the use and charge Tenant for the increase in premiums, and Tenant's failure to pay Landlord the amount of such increase within 10 days after receipt of Landlord's written demand shall be an event of default;

iv. In any manner that creates unusual demands for electricity, heating or air conditioning; or

v. For any purpose except the Permitted Use, unless consented to by Landlord in writing.

b. *Prohibited Equipment in Premises.* Tenant shall not use or install any equipment in the Premises that places unusual demands on the electrical, heating or air conditioning systems ("High Demand Equipment") without Landlord's prior written consent. Any determination regarding whether equipment should be classified as High Demand Equipment shall be consistent with standards regarding such equipment in comparable office buildings owned by Landlord in the Raleigh-Durham market. No such consent will be given if Landlord determines, in its opinion, that such High Demand Equipment may not be safely used in the Premises or that electrical service is not adequate to support the High Demand Equipment. Landlord's consent

may be conditioned, without limitation, upon separate metering of the High Demand Equipment and Tenant's payment of all engineering, equipment, installation, maintenance, removal and restoration costs and utility charges associated with the High Demand Equipment and the separate meter, as well as administrative costs as provided below. If High Demand Equipment used in the Premises by Tenant affects the temperature otherwise maintained by the heating and air conditioning system, Landlord shall have the right to install supplemental air conditioning units in the Premises and/or require Tenant to use any existing supplemental units serving the Premises. If supplemental units are required by Landlord pursuant to the foregoing sentence, or if Tenant requests the installation and/or use of any supplemental units, then the cost of engineering, installation, operation and maintenance of the units shall be paid by Tenant. All costs and expenses relating to High Demand Equipment and Landlord's reasonable administrative costs (such as reading meters and calculating invoices) shall be Additional Rent, payable by Tenant within ten (10) days after receipt of Landlord's invoice.

## 5. RENT.

a. *Payment Obligations.* Beginning on the Rent Commencement Date, Tenant shall pay Base Rent and Additional Rent (collectively, "Rent") on or before the first day of each calendar month during the Term, as follows:

i. Rent payments shall be sent to the Rent Payment Address set forth in Section 1g.

ii. Rent shall be paid without previous demand or notice and without set off or deduction. Tenant's obligation to pay Rent under this Lease is completely separate and independent from any of Landlord's obligations under this Lease. Any payment by Tenant or acceptance by Landlord of a lesser amount than shall be due from Tenant to Landlord shall be treated as a payment on account. The acceptance by Landlord of a check or other draft for a lesser amount with an endorsement or statement thereon, or upon any letter accompanying such check, that such lesser amount is payment in full shall be given no effect, and Landlord may accept such check or draft without prejudice to any other rights or remedies which Landlord may have against Tenant.

iii. If the Rent Commencement Date is a day other than the first day of a calendar month, then Rent for such month shall be (i) prorated for the period between the Rent Commencement Date and the last day of the month in which the Rent Commencement Date falls, and (ii) due and payable on the Rent Commencement Date.

iv. If Rent is not received within five days of the due date, Landlord shall be entitled to an overdue payment fee in the amount of the greater of \$10.00 or five percent (5%) of all Rent due; provided that Provided, however, Tenant shall be entitled to one late payment per calendar year without assessment of such overdue payment charge.

v. If Landlord presents Tenant's check to any bank and Tenant has insufficient funds to pay for such check, then Landlord shall be entitled to the maximum lawful bad check fee or five percent (5%) of the amount of such check, whichever amount is less.

b. *Base Rent.* Tenant shall pay Base Rent as set forth in Section 1f.



c. *Additional Rent.* In addition to Base Rent, Tenant shall pay as rent all sums and charges due and payable by Tenant under this Lease (“Additional Rent”), including, but not limited to, Tenant’s Proportionate Share of the increase in Operating Expenses and Taxes as set forth in Lease Addendum Number Two.

6. **SECURITY DEPOSIT.** Landlord acknowledges receipt from Tenant of the Security Deposit in the amount set forth in Section lh. Landlord shall retain the Security Deposit as security for the performance by Tenant of all of its Lease obligations. The Security Deposit shall not bear interest and may be commingled with other funds. If Tenant at any time fails to perform any of its obligations under this Lease beyond any applicable cure period, including, without limitation, its Rent or other payment obligations, its restoration obligations, or its insurance and indemnity obligations, then Landlord, may, at its option, apply the Security Deposit (or any portion) to cure Tenant’s default or to pay for damages caused by Tenant’s default. If the Lease has been terminated, then Landlord may apply the Security Deposit (or any portion) against the damages incurred as a consequence of Tenant’s breach. The application of the Security Deposit shall not limit Landlord’s remedies for default under the terms of this Lease. If Landlord depletes the Security Deposit, in whole or in part, prior to the Expiration Date or any termination of this Lease, then Tenant shall restore immediately the amount so used by Landlord following receipt of notice. Within 30 days after the expiration or earlier termination date of this Lease, Landlord shall refund to Tenant any unused portion of the Security Deposit after first deducting the amounts, if any, necessary to cure any outstanding default of Tenant, to pay any outstanding damages for Tenant’s breach of the Lease, or to restore the Premises to the condition to which Tenant is required to leave the Premises upon the expiration or termination of the Lease. Landlord shall deliver the unused portion of the Security Deposit to Tenant’s Notice Address set forth in Section 11 above. If Tenant’s Notice Address is the address for the Premises, then Tenant shall notify Landlord in writing of a forwarding address to which Landlord should send the Security Deposit. Tenant may not credit any unused portion of the Security Deposit against Rent owed under the Lease.

7. **SERVICES BY LANDLORD.**

a. *Base Services.* Provided that Tenant is not then in default beyond any applicable cure period, Landlord shall cause to be furnished to the Building, or as applicable, the Premises, in common with other tenants the following services:

- i. Water (if available from city mains) for drinking, lavatory and toilet purposes.
- ii. Electricity (if available from the utility supplier) for the building standard fluorescent lighting and for the operation of general office machines.
- iii. Building standard fluorescent lighting composed of 2’ x 4’ fixtures; Tenant shall service, replace and maintain at its own expense any incandescent fixtures, table lamps, or lighting other than the Building Standard fluorescent light, and any dimmers or lighting controls other than controls for the building standard fluorescent lighting.

iv. Heating and air conditioning for the reasonably comfortable use and occupancy of the Premises during Business Hours as set forth in Section 1i.

v. After Business Hours, weekend and holiday heating and air conditioning at the After Hours HVAC rate set forth in Section 1j; which rates may be increased in a commercially reasonable amount upon any renewal or extension of the Term.

vi. Janitorial services five days a week (excluding National and State holidays) after Business Hours.

vii. A reasonable pro-rata share of the unreserved, nonexclusive parking spaces of the Building, not to exceed the Parking specified in Section 1k, for use by Tenant's employees and visitors in common with the other tenants and their employees and visitors.

b. *Landlord's Maintenance.* Landlord shall make all repairs and replacements to the Building (including Building fixtures and equipment), Common Areas and Building Standard Improvements in the Premises, except for those repairs and replacements that Tenant must make under Article 8 so as to maintain such areas in first-class condition consistent with comparable office space in the Raleigh-Durham market. Landlord shall not be obligated to repair or maintain Non-Standard Improvements (as defined in this Lease). Landlord's maintenance obligations shall include the roof, foundation, exterior walls, interior structural walls, all structural components, and all Building systems, such as mechanical, electrical, HVAC, and plumbing. Repairs or replacements shall be made within a commercially reasonable time (depending on the nature of the repair or replacement needed) after receiving notice from Tenant or Landlord having actual knowledge of the need for a repair or replacement.

c. *No Abatement.* There shall be no abatement or reduction of Rent by reason of any of the foregoing services not being continuously provided to Tenant. Landlord shall have the right to shut down the Building systems (including electricity and HVAC systems) for required maintenance and safety inspections, and in cases of emergency. Notwithstanding the foregoing, Landlord agrees (i) to use commercially reasonable efforts to shut down such Building systems after Business Hours or on weekends and (ii) that if there is an interruption within Landlord's reasonable control (other than an interruption resulting from a fire, other casualty or any failure on the part of any utility provider) of "Essential Building Services" (as defined below) which Landlord is to provide that renders the Premises untenable (unless Landlord has commenced to cure such cause or remediate such interruption and it cannot be fully cured or reasonably remediated within the seven day period) and continues for a period of seven (7) or more consecutive days after Landlord receives notice from Tenant (an "Unauthorized Interruption"), Tenant's Rent will, except as provided below, abate commencing at the end of said seven-day period until the Premises (or applicable portion thereof) are tenable. If the Unauthorized Interruption is the result of any misconduct or negligence acts of Tenant or Tenant's Agents, Rent will not abate. If Tenant continues to use any part of the Premises to conduct its business, the Rent will only abate for the untenable part not used. For the purposes of this Section, "Essential Building Services" shall mean, heating, water, electricity, air conditioning, functioning restrooms and elevator service.

**8. TENANT'S ACCEPTANCE AND MAINTENANCE OF PREMISES.**

a. *Acceptance of Premises.* Except as expressly provided otherwise in this Lease, Tenant's occupancy of the Premises is Tenant's representation to Landlord that (i) Tenant has examined and inspected the Premises, (ii) finds the Premises to be as represented by Landlord and satisfactory for Tenant's intended use, and (iii) constitutes Tenant's acceptance of the Premises "as is". Landlord makes no representation or warranty as to the condition of the Premises except as specifically set forth elsewhere in this Lease.

b. *Move-In Obligations.* Tenant shall schedule its move-in with the Landlord's Property Manager. Unless otherwise approved by Landlord's Property Manager, move-in shall not take place during Business Hours. Prior to the move-in, Tenant must provide the name, address and contact information for Tenant's moving company, and the moving company must comply with Landlord's requirements, including insurance. During Tenant's move-in, a representative of Tenant must be on-site with Tenant's moving company to insure proper treatment of the Building and the Premises. Elevators, entrances, hallways and other Common Areas must remain in use for the general public during business hours. Any specialized use of elevators or other Common Areas must be coordinated with Landlord's Property Manager. Tenant must properly dispose of all packing material and refuse in accordance with the Rules and Regulations. Any actual damage or destruction to the Building or the Premises caused by Tenant or its moving company, employees, agents or contractors during Tenant's move-in will be the sole responsibility of Tenant.

c. *Tenant's Maintenance.* Subject to Landlord's maintenance and repair obligations under the Lease, Tenant shall: (i) keep the Premises and fixtures in good order; (ii) repair or replace (to the extent reasonably necessary) Non-Standard Improvements installed by or at Tenant's request that serve the Premises (unless the Lease is ended because of casualty loss or condemnation); and (iii) not commit waste. "Non-Standard Improvements" means such items as (i) High Demand Equipment and separate meters, (ii) all wiring and cabling from the point of origin to the termination point, (iii) raised floors for computer or communications systems, (iv) telephone equipment, security systems, and UPS systems, (v) equipment racks, (vi) alterations installed by or at the request of Tenant after the Commencement Date, (vii) equipment installed in a kitchen, kitchenette or break room within the Premises, including any ice machine, refrigerator, dishwasher, garbage disposal, coffee machine and microwave, sink and related faucets, water filter and water purification system, (viii) kitchen drain lines; and (ix) any other improvements that are not part of the Building Standard Improvements, including, but not limited to, special equipment, decorative treatments, lights and fixtures and executive restrooms.

d. *Alterations to Premises.* Tenant shall make no structural or interior alterations to the Premises without the prior written approval of Landlord. If Tenant requests alterations, Tenant shall provide Landlord with a complete set of construction drawings. If the requested alterations are approved by Landlord, then Landlord shall determine the actual cost of the work to be done [to include a construction supervision fee of five percent (5%)]. Tenant may then either agree to pay Landlord to have the work done or withdraw its request for alterations. The construction supervision fee for the initial tenant improvements shall be as provided in the attached Workletter, if any.

e. *Restoration of Premises.* At the expiration or earlier termination of this Lease, Tenant shall (i) deliver each and every part of the Premises in good repair and condition, ordinary wear and tear, the acts of Landlord, its agents, employees and contractors and damage by insured casualty excepted, and (ii) restore the Premises at Tenant's sole expense to the same condition as existed at the Commencement Date, ordinary wear and tear, the acts of Landlord, its agents, employees and contractors and damage by insured casualty excepted. If Tenant has required or installed Non-Standard Improvements, such improvements shall be removed as part of Tenant's restoration obligation. Landlord, however, may grant Tenant the right to leave any Non-Standard Improvements in the Premises if at the time of such Non-Standard Improvements were installed, Landlord agreed in writing that Tenant could leave such improvements. Tenant shall repair any damage caused by the removal of any Non-Standard Improvements.

f. *Landlord's Performance of Tenant's Obligations.* If Tenant does not perform its maintenance or restoration obligations in a timely manner, commencing the same within 30 days after receipt of written notice from Landlord specifying the work needed, and thereafter diligently and continuously pursuing the work until completion, then Landlord shall have the right, but not the obligation, to perform such work on Tenant's behalf. Any amounts expended by Landlord on such maintenance or restoration shall be Additional Rent to be paid by Tenant to Landlord within 30 days after written demand.

g. *Construction Liens.* Tenant shall keep Landlord's property, including, without limitation, the Premises, Building, Common Areas and real estate upon which the Building and Common Areas are situated (collectively "Landlord's Property"), free from any liens arising out of any work performed, materials furnished, or obligations incurred by or on behalf of Tenant. Should any lien or claim of lien be filed against Landlord's Property by reason of any act or omission of Tenant or any of Tenant's agents, employees, contractors or representatives, then Tenant shall cause the same to be canceled and discharged of record by bond or otherwise within 10 days after the filing thereof. Should Tenant fail to discharge the lien within 30 days, then Landlord may discharge the lien. The amount paid by Landlord to discharge the lien (whether directly or by bond), plus all reasonable administrative and legal costs incurred by Landlord, shall be Additional Rent payable by Tenant within 30 days after receipt of Landlord's written demand. The remedies provided herein shall be in addition to all other remedies available to Landlord under this Lease or otherwise.

9. **PROPERTY OF TENANT.** Tenant shall pay when due all taxes levied or assessed upon Tenant's equipment, fixtures, furniture, leasehold improvements and personal property located in the Premises. Provided Tenant is not in default beyond any applicable cure period, Tenant may remove all fixtures and equipment which it has placed in the Premises; provided, however, Tenant must repair all damages in excess of normal wear and tear caused by such removal. If Tenant does not remove its property from the Premises upon the expiration or earlier termination (for whatever cause) of this Lease, such property shall be deemed abandoned by Tenant, and Landlord may dispose of the same in whatever manner Landlord may elect without any liability to Tenant.

10. **SIGNS.** Tenant may not erect, install or display any sign or advertising material upon the exterior of the Building or Premises (including any exterior doors, walls or windows) without the prior written consent of Landlord, which consent may be withheld in Landlord's sole discretion. Door and directory signage shall be provided and installed by Landlord in accordance with Building Standards at Tenant's expense, unless otherwise provided in the Workletter attached as Lease Addendum Number One.

## 11. ACCESS TO PREMISES.

a. *Tenant's Access.* Tenant, its agents, employees, invitees, and guests, shall have access to the Premises and reasonable ingress and egress to the Common Areas of the Building 24 hours a day, seven days a week; provided, however, Landlord by reasonable regulation may control but not unreasonably restrict such access for the comfort, convenience, safety and protection of all tenants in the Building, or as needed for making repairs and alterations. Tenant shall be responsible for providing access to the Premises to its agents, employees, invitees and guests after Business Hours and on weekends and holidays, but in no event shall Tenant's use of and access to the Premises during non-Business Hours compromise the security of the Building.

b. *Landlord's Access.* Landlord shall have the right to enter the Premises at any time without notice in the event of an emergency. Additionally, Landlord shall have the right, at all reasonable times and upon reasonable oral notice, either itself or through its authorized agents, to enter the Premises (i) to make repairs, alterations or changes that Landlord is permitted or required to make pursuant to the terms of this Lease, (ii) to inspect the Premises, mechanical systems and electrical devices, and (iii) to show the Premises to prospective mortgagees and purchasers. Within 180 days prior to the Expiration Date, Landlord shall have the right, either itself or through its authorized agents upon notice to Tenant, to enter the Premises at all reasonable times during Business Hours to show prospective tenants. Except in cases of emergency, Landlord shall use reasonable efforts to minimize any interruption to Tenant's business operations during any entry by Landlord into the Premises. Tenant, in its sole discretion, may have a representative accompany the Landlord during Landlord's access, if available.

12. **TENANT'S COMPLIANCE.** Subject to Landlord's representations and warranties set forth in this Lease, Tenant shall comply with all applicable laws, ordinances and regulations affecting the Premises, whether now existing or hereafter enacted. Tenant shall comply with the Rules and Regulations attached as **Exhibit B**. The Rules and Regulations may be modified from time to time by Landlord, effective as of the date delivered to Tenant or posted on the Premises, provided such rules are reasonable in scope and uniformly applicable to all tenants in the Building. Any conflict between this Lease and the Rules and Regulations shall be governed by the terms of this Lease.

## 13. INSURANCE REQUIREMENTS.

a. *Tenant's Liability Insurance.* Throughout the Term, Tenant, at its sole cost and expense, shall keep or cause to be kept for the mutual benefit of Landlord, Landlord's Property Manager, and Tenant, Commercial General Liability Insurance (1986 ISO Form or its equivalent) with a combined single limit, each Occurrence and General Aggregate-per location, of at least \$2,000,000.00, which policy shall insure against liability of Tenant, arising out of and in connection with Tenant's use of the Premises, and which shall insure the indemnity provisions contained in this Lease. Landlord and its managing agent shall be named as an Additional Insured on any and all liability insurance policies required under this Lease.

b. *Tenant's Property Insurance.* Tenant, at its own cost and expense, shall also carry the equivalent of ISO Special Form Property Insurance on Tenant's Property for full replacement value and with coinsurance waived. For purposes of this provision, "Tenant's Property" shall mean Tenant's personal property and fixtures, and any improvements to the Premises that were paid for by Tenant (and were not provided to the Premises pursuant to a tenant improvement allowance provided to Tenant by Landlord or at Landlord's cost).

c. *Certificates of Insurance.* Prior to taking possession of the Premises, and annually thereafter, Tenant shall deliver to Landlord certificates or other evidence of insurance satisfactory to Landlord. If Tenant fails to provide Landlord with certificates or other evidence of insurance coverage, Landlord may obtain the required coverage on Tenant's behalf, in which event the cost of such coverage shall be Additional Rent due and payable by Tenant within 10 days after receipt of Landlord's written demand.

d. *Insurance Policy Requirements.* Tenant's insurance policies required by this Lease shall: (i) be issued by insurance companies licensed to do business in the state in which the Premises are located with a general policyholder's ratings of at least A- and a financial rating of at least VI in the most current Best's Insurance Reports available on the Commencement Date, or if the Best's ratings are changed or discontinued, the parties shall agree to a comparable method of rating insurance companies; (ii) endorsed to be primary to all insurance available to Landlord, with Landlord's being excess, secondary or noncontributory; (iii) contain only standard and/or usual exclusions or restrictions; (iv) have a deductible or self-insured retention of no more than \$50,000.00 unless approved in writing by Landlord; and (v) provide that the policies cannot be canceled, non-renewed, or coverage reduced except after at least 30 days' prior notice to Landlord. All deductibles and/or retentions shall be paid by, assumed by, for the account of, and at Tenant's sole risk. Tenant may provide the insurance required by virtue of the terms of this Lease by means of a policy or policies of blanket insurance so long as: (a) the amount of the total insurance allocated to the Premises under the terms of the blanket policy or policies furnishes protection equivalent to that of separate policies in the amounts required by the terms of this Lease; and (b) the blanket policy or policies comply in all other respects with the requirements of this Lease.

e. *Right to Increase Requirements.* Landlord shall have the right, upon prior notice to Tenant but no more than once every three years during the Term, to require Tenant to increase the limit and coverage amount of any insurance Tenant is required to maintain under this Lease to an amount that Landlord or its mortgagee, in the reasonable judgment of either, may deem sufficient, provided that the increased limits are reasonable and consistent with those required by other owners of similar office buildings in the same geographic region.

f. *Landlord's Property Insurance.* Landlord shall keep the Building, including the improvements (but excluding Tenant's Property), insured against damage and destruction by perils insured by the equivalent of ISO Special Form Property Insurance for full replacement value.

g. *Mutual Waiver of Subrogation.* Anything in this Lease to the contrary notwithstanding, Landlord hereby releases and waives unto Tenant (including all partners, stockholders, officers, directors, employees and agents thereof), its successors and assigns, and Tenant hereby releases and waives unto Landlord (including all partners, stockholders, officers, directors, employees and agents thereof), its successors and assigns, all rights to claim damages for any injury, loss, cost or damage to persons or to the Premises or any other casualty, as long as the amount of such injury, loss, cost or damage has been paid either to Landlord, Tenant, or any other person, firm or corporation, under the terms of any Property, General Liability, or other policy of insurance, to the extent such releases or waivers are permitted under applicable law. As respects all policies of insurance carried or maintained pursuant to this Lease and to the extent permitted under such policies, Tenant and Landlord each waive the insurance carriers' rights of subrogation. For purposes of this provision, insurance proceeds paid to either party shall be deemed to include any deductible or self-insurance retention amount for which that party is responsible. A party's failure to obtain or maintain any insurance coverage required to be carried pursuant to the terms of this Lease shall not negate the waivers and releases set forth herein as long as the insurance that the party failed to obtain or maintain would have covered the loss or damage for which the party is waiving its claims. Nothing in this provision shall be deemed a waiver or release by Landlord of its right to claim, demand and collect insurance proceeds directly from Tenant's insurer pursuant to Landlord's status as an additional insured under any insurance policy Tenant is required to carry pursuant to the terms of this Lease.

14. **INDEMNITY.** Subject to the insurance requirements, releases and mutual waivers of subrogation set forth in this Lease:

a. *Tenant's Indemnity.* Tenant shall indemnify, defend and hold Landlord harmless from and against any and all claims, damages, losses, liabilities, lawsuits, costs and expenses (including attorneys' fees at all tribunal levels) arising out of or related to (i) any activity, work, or other thing done, permitted or suffered by Tenant in or about the Premises or the Building, (ii) any breach or default by Tenant in the performance of any of its obligations under this Lease, or (iii) any act or neglect of Tenant, or any officer, agent, employee, contractor, servant, invitee or guest of Tenant.

b. *Landlord's Indemnity.* Landlord shall indemnify, defend and hold Tenant harmless from and against any and all claims, damages, losses, liabilities, lawsuits, costs and expenses (including attorneys' fees at all tribunal levels) arising out of or related to (i) any activity, work, or other thing done by Landlord in the Building, or any part thereof, (ii) any breach or default by Landlord in the performance of any of its obligations under this Lease, or (iii) any act or neglect of Landlord, or any officer, agent, employee, contractor, servant, invitee or guest of Landlord.

c. *Defense Obligation.* If any such action is brought against Landlord under Section 14(a) above, then Tenant, upon notice from Landlord, shall defend the same through counsel reasonably acceptable to Landlord. The provisions of this Section shall survive the termination of this Lease.

15. **QUIET ENJOYMENT.** Tenant shall have quiet enjoyment and possession of the Premises, provided Tenant is not in default of its obligations under this Lease. No action of Landlord working in other space in the Building, or in repairing or restoring the Premises in accordance with its obligations hereunder, shall be deemed a breach of this covenant.

**16. SUBORDINATION AND ATTORNMENT; NON-DISTURBANCE; AND ESTOPPEL CERTIFICATE.**

a. *Subordination and Attornment.* Tenant agrees to execute within ten (10) business days after request to do so from Landlord or its mortgagee (to include a grantee of a security deed) an agreement:

i. Making this Lease superior or subordinate to the interests of the mortgagee;

ii. Agreeing to attorn to the mortgagee;

iii. Giving the mortgagee notice of, and a reasonable opportunity (which shall in no event be less than 30 days after notice thereof is delivered to mortgagee) to cure any Landlord default and agreeing to accept such cure if effected by the mortgagee;

iv. Permitting the mortgagee (or other purchaser at any foreclosure sale), and its successors and assigns, on acquiring Landlord's interest in the Premises and the Lease, to become substitute landlord hereunder upon the assumption of all obligations of Landlord; and

v. Agreeing to attorn to any successor landlord.

b. *Non-Disturbance.* Tenant's obligation to subordinate its interests or attorn to any mortgagee is conditioned upon the mortgagee's agreement not to disturb Tenant's possession and quiet enjoyment of the Premises under this Lease so long as Tenant is not in default beyond any applicable cure period under the Lease. Landlord hereby represents that there is no mortgage or deed of trust encumbering the Premises as of the Effective Date.

c. *Estoppel Certificates.* Tenant agrees to execute within ten (10) business days after request, and as often as reasonably requested, estoppel certificates confirming any factual matter requested by Landlord which is true and is within Tenant's actual knowledge regarding this Lease, and the Premises, including but not limited to: (i) the date of occupancy, (ii) Expiration Date, (iii) the amount of Rent due and date to which Rent is paid, (iii) whether Tenant has any defense or offsets to the enforcement of this Lease or the Rent payable, (iv) any default or breach by Landlord, and (v) whether this Lease, together with any modifications or amendments, is in full force and effect.

**17. ASSIGNMENT — SUBLEASE.**

a. *Landlord Consent.* Except as provided in subsection (b) below, Tenant may not assign or encumber this Lease or its interest in the Premises arising under this Lease, and may not sublet all or any part of the Premises, without first obtaining the written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. One consent shall not be the basis for any further consent.



b. *Permitted Assignments/Subleases.* Notwithstanding the foregoing, Tenant may assign this Lease or sublease part or all of the Premises without Landlord's consent to: (i) any corporation, limited liability company, or partnership that controls, is controlled by, or is under common control with, Tenant; or (ii) any corporation or limited liability company resulting from the merger or consolidation with Tenant or to any entity that acquires all of Tenant's assets as a going concern of the business that is being conducted on the Premises; provided, however, the assignor remains liable under the Lease and the assignee or sublessee is a bona fide entity and assumes the obligations of Tenant, is as creditworthy as the Tenant, and continues the same Permitted Use as provided under Article 4.

c. *Notice to Landlord.* Landlord must be given prior written notice of every assignment or subletting, and failure to do so shall be a default hereunder.

d. *Prohibited Assignments/Subleases.* In no event shall this Lease be assignable by operation of any law, and Tenant's rights hereunder may not become, and shall not be listed by Tenant as an asset under any bankruptcy, insolvency or reorganization proceedings. Acceptance of Rent by Landlord after any non-permitted assignment or sublease shall not constitute approval thereof by Landlord.

e. *Limitation on Rights of Assignee/Sublessee.* Any assignment for which Landlord's consent is required shall not include the right to exercise any options to renew the Term, expand the Premises or similar options, unless specifically provided for in the consent.

f. *Tenant Not Released.* No assignment or sublease shall release Tenant of any of its obligations under this Lease.

g. *Landlord's Right to Collect Sublease Rents upon Tenant Default.* If the Premises (or any portion) is sublet and Tenant defaults under its obligations to Landlord and such default continues beyond any applicable cure period, then Landlord is authorized, at its option, to collect all sublease rents directly from the Sublessee. Tenant hereby assigns the right to collect the sublease rents to Landlord in the event of Tenant default. The collection of sublease rents by Landlord shall not relieve Tenant of its obligations under this Lease, nor shall it create a contractual relationship between Sublessee and Landlord or give Sublessee any greater estate or right to the Premises than contained in its Sublease.

h. *Excess Rents.* If Tenant assigns this Lease or subleases all or part of the Premises at a rental rate that exceeds the rentals paid to Landlord, then one half of any such excess shall be paid over to Landlord by Tenant less Tenant's costs incurred in connection with such assignment or sublease including without limitation, upfit costs and broker's fees.

i. *Landlord's Fees.* Tenant shall pay Landlord an administration fee of \$500.00 per assignment or sublease transaction for which Landlord's consent is required.

## 18. DAMAGES TO PREMISES.

a. *Landlord's Restoration Obligations.* If the Building or Premises are damaged by fire or other casualty ("Casualty"), then, unless the Lease is terminated as provided in this Article 18, Landlord shall repair and restore the Premises to substantially the same condition of the Premises immediately prior to such Casualty, subject to the following terms and conditions:

- i. The casualty must be insured under Landlord's insurance policies, and Landlord's obligation is limited to the extent of the insurance proceeds received by Landlord. Landlord's duty to repair and restore the Premises shall not begin until receipt of the insurance proceeds.
- ii. Landlord's lender(s) must permit the insurance proceeds to be used for such repair and restoration.
- iii. Landlord shall have no obligation to repair and restore Tenant's trade fixtures, decorations, signs, contents, or any Non-Standard Improvements to the Premises.

b. *Tenant's Restoration Obligations.* Unless the Lease is terminated as provided in this Article 18, Tenant shall promptly repair, restore, or replace Tenant's Property. All repair, restoration or replacement of Tenant's Property shall be at least to the same condition as existed prior to the Casualty.

c. *Termination of Lease by Landlord.* Landlord shall have the option of terminating the Lease following the Casualty if: (i) the Premises is rendered wholly untenable; (ii) the Premises is damaged in whole or in part as a result of a risk which is not covered by Landlord's insurance policies; (iii) Landlord's lender does not permit a sufficient amount of the insurance proceeds to be used for restoration purposes; (iv) the Premises is damaged in whole or in part during the last two years of the Term; or (v) the Building containing the Premises is damaged (whether or not the Premises is damaged) to an extent of fifty percent (50%) or more of the fair market value thereof. If Landlord elects to terminate this Lease, then it shall give notice of the cancellation to Tenant within (60) days after the date of the Casualty. Tenant shall vacate and surrender the Premises to Landlord within (15) days after receipt of the notice of termination.

d. *Termination of Lease by Tenant.* Tenant shall have the option of terminating the Lease if: (i) Landlord has failed to substantially restore the damaged Building or Premises within 180 days of the Casualty ("Restoration Period"); (ii) the Restoration Period has not been delayed by force majeure or delays caused by Tenant ("Excused Delays"); and (iii) Tenant gives Landlord notice of the termination within 15 days after the end of the Restoration Period (as extended by Excused Delays). If Landlord is delayed by Excused Delays, then Landlord must provide Tenant with notice of the delay within 15 days of the Excused Delay event stating the reason for the delay and a good faith estimate of the length of the delay. Subject to subsection (c) hereof, upon termination as provided for herein, Tenant's liability for Rent and Additional Rent shall cease as of the date of termination.

e. *Rent Abatement.* If Premises is rendered wholly untenable by the Casualty, then the Rent payable by Tenant shall be fully abated. If the Premises is only partially damaged, then Tenant shall continue the operation of Tenant's business in any part not damaged to the extent reasonably practicable from the standpoint of Tenant's prudent business management, and Rent and other charges shall be abated proportionately to the portion of the Premises rendered untenable. The abatement shall be from the date of the Casualty until the Premises have been

substantially repaired and restored, or until Tenant's business operations are restored in the entire Premises, whichever shall first occur. However, if the Casualty is caused by the negligence or other wrongful conduct of Tenant or of Tenant's subtenants, licensees, contractors, or invitees, or their respective agents or employees, there shall be no abatement of Rent. The abatement of the Rent set forth above, and the right to terminate the Lease set forth in Section 18d, are Tenant's exclusive remedies against Landlord in the event of a Casualty.

**19. EMINENT DOMAIN.** If all of the Premises are taken under the power of eminent domain (or by conveyance in lieu thereof), then this Lease shall terminate as of the date possession is taken by the condemnor, and Rent shall be adjusted between Landlord and Tenant as of such date. If only a portion of the Premises is taken and Tenant determines in its sole discretion from the standpoint of prudent business management it can continue use of the remainder, then this Lease will not terminate, but Rent shall abate in a just and proportionate amount to the loss of use occasioned by the taking. Landlord shall be entitled to receive and retain the entire condemnation award for the taking of the Building and Premises. Tenant shall have no right or claim against Landlord for any part of any award received by Landlord for the taking. Tenant, however, shall not be prevented from making a claim against the condemning party (but not against Landlord) for any moving expenses, loss of profits, or taking of Tenant's personal property (other than its leasehold estate) to which Tenant may be entitled; provided that any such award shall not reduce the amount of the award otherwise payable to Landlord for the taking of the Building and Premises.

**20. ENVIRONMENTAL COMPLIANCE.**

a. *Tenant's Responsibility.* Tenant shall not (either with or without negligence) cause or permit the escape, disposal or release of any biologically active or other hazardous substances or materials on the Property. For the purposes of this Article 20, the term "Property" shall include the Premises, Building, all Common Areas, the real estate upon which the Building and Common Areas are located; all personal property (including that owned by Tenant); and the soil, ground water, and surface water of the real estate upon which the Building is located. Tenant shall not allow the storage or use of such substances or materials in any manner not sanctioned by law or in compliance with the highest standards prevailing in the industry for the storage and use of such substances or materials, nor allow to be brought onto the Property any such materials or substances except to use in the ordinary course of Tenant's business, and then only after notice is given to Landlord of the identity of such substances or materials. No such notice shall be required, however, for commercially reasonable amounts of ordinary office supplies and janitorial supplies.

b. *Liability of the Parties.* Landlord represents and warrants that, to Landlord's knowledge, there are no hazardous materials on the Property as of the Commencement Date in violation of any laws. Landlord shall indemnify and hold Tenant harmless from any penalty, fine, claim, demand, liability, cost, or charge whatsoever which results from Landlord's violation of this representation and warranty, unless the hazardous materials are present on the Property due to the act or omission of Tenant or its agents, employees, officers, or contractors, in which event Tenant shall be obligated to indemnify Landlord as hereafter provided. Tenant shall hold Landlord free, harmless, and indemnified from any penalty, fine, claim, demand, liability, cost, or charge whatsoever which Landlord shall incur, or which Landlord would otherwise incur, by

reason of Tenant's material failure to comply with this Article 20 including, but not limited to: (i) the cost of full remediation of any contamination to bring the Property into the same condition as on the Commencement Date and into material compliance with all Environmental Laws existing as of the Compliance Date; (ii) the reasonable cost of all appropriate tests and examinations of the Premises to confirm that the Premises and any other contaminated areas have been remediated and brought into material compliance with law; and (iii) the reasonable fees and expenses of Landlord's attorneys, engineers, and consultants incurred by Landlord in enforcing and confirming compliance with this Article 20. Notwithstanding the foregoing, Tenant's obligations under this Article 20 shall not apply to any condition or matter constituting a violation of any law that was not caused, in whole or in part, by Tenant or Tenant's agents, employees, officers, partners, contractors, servants or invitees which existed prior to the commencement of Tenant's use or occupancy of the Premises and to the extent the violation is caused by, or results from, the acts or omissions of Landlord its agents, employees, officers or contractors. The covenants contained in this Article 20 shall survive the expiration or termination of this Lease, and shall continue for so long as either party and its successors and assigns may be subject to any expense, liability, charge, penalty, or obligation against which the other party has agreed to indemnify it under this Article 20.

c. *Inspections by Landlord.* Landlord and its engineers, technicians, and consultants (collectively the "Auditors"), from time to time as Landlord deems appropriate upon prior reasonable notice to Tenant, may conduct periodic tests and examinations ("Audits") of the Premises to confirm and monitor Tenant's compliance with this Article 20 (not to exceed two Audits per calendar year). Such Audits shall be conducted in such a manner as to minimize the interference with Tenant's Permitted Use; however, in all cases, the Audits shall be of such nature and scope as shall be reasonably required by then existing technology to confirm Tenant's compliance with this Article 20. Tenant shall fully cooperate with Landlord and its Auditors in the conduct of such Audits. The cost of such Audits shall be paid by Landlord unless an Audit shall disclose a material failure of Tenant to comply with this Article 20, in which case, the reasonable cost of such Audit shall be paid for by Tenant within 10 days after receipt of Landlord's written demand.

## 21. **DEFAULT.**

a. *Tenant's Default.* Tenant shall be in default under this Lease if Tenant:

i. Fails to pay any Base Rent, Additional Rent, or any other sum of money that Tenant is obligated to pay, as provided in this Lease, within five days after the due date provided, however, that with respect to the first two times during any consecutive 12-month period that Tenant fails to pay Rent when due (each a "Late Payment"), the Late Payment shall not be considered an event of default if, within five business days after receipt of notice from Landlord, Tenant submits the entire Rent due, including any applicable late charge. If directed by Landlord, Tenant must pay the entire amount of the Late Payment with certified funds. Landlord shall forgive Tenant only two Late Payments per any consecutive 12-month period, and any additional Late Payments during that period shall constitute an event of default;

ii. Breaches any other agreement, covenant or obligation in this Lease and such breach is not remedied within 30 days after Landlord gives Tenant written notice in accordance with Article 24 below specifying the breach, or if such breach cannot, with due diligence, be cured within 30 days, if Tenant does not commence curing within 30 days and with reasonable diligence completely cure the breach within a reasonable period of time after the notice;

iii. Files any petition or action for relief under any creditor's law (including bankruptcy, reorganization, or similar action), either in state or federal court, or has such a petition or action filed against it which is not stayed or vacated within 60 days after filing; or

iv. Makes any transfer in fraud of creditors as defined in Section 548 of the United States Bankruptcy Code (11 U.S.C. 548, as amended or replaced), has a receiver appointed for its assets (and the appointment is not stayed or vacated within (30) days), or makes an assignment for benefit of creditors.

b. *Landlord's Remedies.* In the event of a Tenant default, Landlord, at its option, may do one or more of the following:

i. Terminate this Lease and recover all damages caused by Tenant's breach;

ii. Pursuant to summary process, repossess the Premises, with or without terminating the Lease, and relet the Premises at such amount as Landlord deems reasonable;

iii. Declare the entire remaining Base Rent and Additional Rent immediately due and payable, such amount to be discounted to its present value at a discount rate equal to the U.S. Treasury Bill or Note rate with the closest maturity to the remaining term of the Lease as selected by Landlord; provided, however, after receiving payment of the accelerated Rent from Tenant, Landlord shall be obligated to turn over to Tenant any proceeds actually received by Landlord for reletting the Premises during the remainder of the Term (less any Reletting Costs, as defined below), up to the amount of accelerated Rent received from Tenant pursuant to this provision.

iv. Bring action for recovery of all amounts due from Tenant; or

v. Pursue any other remedy available in law or equity.

c. *Landlord's Expenses.* If the Lease or Tenant's right of possession to the Premises is terminated due to Tenant's default, then all reasonable expenses of Landlord in repairing, restoring, or altering the Premises for reletting as general office space, together with leasing fees and all other expenses in seeking and obtaining a new Tenant (collectively "Reletting Costs"), shall be charged to and be a liability of Tenant.

d. *Remedies Cumulative.* All rights and remedies of Landlord are cumulative, and the exercise of any one shall not exclude Landlord at any other time from exercising a different or inconsistent remedy. No exercise by Landlord of any right or remedy granted herein shall constitute or effect a termination of this Lease unless Landlord shall so elect by notice delivered to Tenant. The failure of Landlord to exercise its rights in connection with this Lease or any breach or violation of any term, or any subsequent breach of the same or any other term, covenant or condition herein contained shall not be a waiver of such term, covenant or condition or any subsequent breach of the same or any other covenant or condition herein contained.

e. *No Accord and Satisfaction.* No acceptance by Landlord of a lesser sum than the Rent, Additional Rent and other sums then due shall be deemed to be other than on account of the earliest installment of such payments due, nor shall any endorsement or statement on any check or any letter accompanying any check or payment be deemed as accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other remedy provided in this Lease.

f. *No Reinstatement.* No payment of money by Tenant to Landlord after the expiration or termination of this Lease shall reinstate or extend the Term, or make ineffective any notice of termination given to Tenant prior to the payment of such money. After the service of notice or the commencement of a suit, or after final judgment granting Landlord possession of the Premises, Landlord may receive and collect any sums due under this Lease, and the payment thereof shall not make ineffective any notice or in any manner affect any pending suit or any judgment previously obtained.

g. *Landlord's Default.* Landlord shall be in default under this Lease if Landlord breaches any agreement, covenant or obligation in this Lease and does not remedy the breach within 15 days after Tenant gives Landlord written notice in accordance with Article 24 below specifying the breach, or if the breach cannot, with due diligence, be cured within 15 days, Landlord does not commence curing within 15 days and with reasonable diligence completely cure the breach within a reasonable period of time after the notice. In the event Landlord fails to cure its breach within the time periods set forth herein, Tenant shall be entitled to pursue any and all remedies available to it at law or in equity; provided, however, that except as expressly provided elsewhere in this Lease, Tenant shall have no right of self-help to perform repairs or any other obligation of Landlord, and shall have no right to withhold, set off or abate Rent.

## 22. MULTIPLE DEFAULTS.

a. *Loss of Option Rights.* Tenant acknowledges that any rights or options of first refusal, or to extend the Term, to expand the size of the Premises, to purchase the Premises or the Building, or other similar rights or options which have been granted to Tenant under this Lease are conditioned upon the prompt and diligent performance of the terms of this Lease by Tenant. Accordingly, should Tenant default under this Lease on two or more occasions during any 12-month period, in addition to all other remedies available to Landlord, all such rights and options shall automatically, and without further action on the part of any party, expire and be of no further force and effect.

b. *Increased Security Deposit. Intentionally Deleted.*

## 23. BANKRUPTCY.

a. *Trustee's Rights.* Landlord and Tenant understand that, notwithstanding contrary terms in this Lease, a trustee or debtor in possession under the United States Bankruptcy Code, as amended, (the "Code") may have certain rights to assume or assign this Lease. This Lease shall not be construed to give the trustee or debtor in possession any rights greater than the minimum rights granted under the Code.

b. *Adequate Assurance.* Landlord and Tenant acknowledge that, pursuant to the Code, Landlord is entitled to adequate assurances of future performance of the provisions of this Lease. The parties agree that the term "adequate assurance" shall include at least the following:

i. In order to assure Landlord that any proposed assignee will have the resources with which to pay all Rent payable pursuant to the provisions of this Lease, any proposed assignee must have, as demonstrated to Landlord's satisfaction, a net worth (as defined in accordance with generally accepted accounting principles consistently applied) of not less than the net worth of Tenant on the Effective Date (as hereinafter defined), increased by seven percent (7%), compounded annually, for each year from the Effective Date through the date of the proposed assignment. It is understood and agreed that the financial condition and resources of Tenant were a material inducement to Landlord in entering into this Lease.

ii. Any proposed assignee must have been engaged in the conduct of business for the five( years prior to any such proposed assignment, which business does not violate the Use provisions under Article 4 above, and such proposed assignee shall continue to engage in the Permitted Use under Article 4. It is understood that Landlord's asset will be substantially impaired if the trustee in bankruptcy or any assignee of this Lease makes any use of the Premises other than the Permitted Use.

c. *Assumption of Lease Obligations.* Any proposed assignee of this Lease must assume and agree to be bound by the provisions of this Lease.

#### 24. NOTICES.

a. *Addresses.* All notices, demands and requests by Landlord or Tenant shall be sent to the Notice Addresses set forth in Section 11, or to such other address as a party may specify by duly given notice. The parties shall notify the other of any change in address, which notification must be at least 15 days in advance of it being effective; provided, however, the Tenant may not change its address to which notices shall thereafter be sent to eliminate the Premises as an acceptable address where notices to such party may be delivered.

b. *Form; Delivery; Receipt.* **ALL NOTICES, DEMANDS AND REQUESTS WHICH MAY BE GIVEN OR WHICH ARE REQUIRED TO BE GIVEN BY EITHER PARTY TO THE OTHER MUST BE IN WRITING UNLESS OTHERWISE SPECIFIED.** Notices, demands or requests shall be deemed to have been properly given for all purposes only if (i) delivered against a written receipt of delivery, (ii) mailed by express, registered or certified mail of the United States Postal Service, return receipt requested, postage prepaid, or (iii) delivered to a nationally recognized overnight courier service for next business day delivery to the receiving party's address as set forth above or (iv) delivered via telecopier or facsimile transmission to the facsimile number listed above, with an original counterpart of such communication sent concurrently as specified in subsection (ii) or (iii) above and with written confirmation of receipt of transmission provided. Each such notice, demand or request shall be deemed to have been received upon the earlier of the actual receipt or refusal by the addressee or

three business days after deposit thereof at any main or branch United States post office if sent in accordance with subsection (ii) above, and the next business day after deposit thereof with the courier if sent pursuant to subsection (iii) above. Notices may be given on behalf of any party by such party's legal counsel.

25. **HOLDING OVER.** If Tenant holds over after the Expiration Date or other termination of this Lease, such holding over shall not be a renewal of this Lease but shall create a tenancy-at-sufferance. Tenant shall continue to be bound by all of the terms and conditions of this Lease, except that during such tenancy-at-sufferance, Tenant shall pay to Landlord (i) Base Rent at the rate equal to one hundred fifty percent (150%) of that provided for as of the expiration or termination date, and (ii) any and all forms of Additional Rent payable under this Lease. The increased Rent during such holding over is intended to compensate Landlord partially for losses, damages and expenses, and delaying Landlord's ability to secure a replacement tenant. Notwithstanding anything contained herein to the contrary, in the event Tenant holds over after the Expiration Date or other termination of this Lease, Landlord shall provide Tenant with forty-eight (48) hours verbal notice to remove its property prior to such property being deemed abandoned as provided in Section 9 hereinabove.

26. **RIGHT TO RELOCATE.**

a. *Substitute Premises.* Prior to the Commencement Date or at any time during the Term or any extension of this Lease but in no event during the last twelve (12) months of the Term, Landlord, at its option, may substitute for the Premises other space in the Building (hereafter called "Substitute Premises"). Insofar as reasonably possible, the Substitute Premises shall be of comparable quality and shall have a comparable square foot area and a configuration substantially similar to the Premises. Landlord shall give Tenant at least one hundred twenty (120) days notice of its intention to relocate Tenant to the Substitute Premises. This notice will be accompanied by a floor plan of the Substitute Premises. After such notice, Tenant shall have ten (10) days within which to agree with Landlord on the proposed Substitute Premises and unless such agreement is reached within such period of time, Landlord may terminate this Lease at the end of the 120-day period of time following the notice; provided, however, should Landlord fail to terminate the Lease within ten (10) days following the expiration of the 120-day period, then: (i) Landlord shall be deemed to have forfeited its right to terminate the Lease pursuant to this paragraph; (ii) Tenant shall have no obligation to relocate to the Substitute Premises; and (iii) the Lease will continue in full force and effect with respect to the Premises.

b. *Upfit of Substitute Premises.* Landlord agrees to construct or alter, at its expense, the Substitute Premises as expeditiously as possible so that the Substitute Premises are in substantially the same condition that the Premises were in immediately prior to the relocation. Landlord shall have the right to reuse the fixtures, improvements and alterations used in the Premises. Tenant agrees to occupy the Substitute Premises as soon as Landlord's work is substantially completed; provided, however, that Landlord shall provide Tenant with at least forty-five (45) days prior notice of substantial completion so that Tenant can coordinate its business operations accordingly.

c. *Relocation Costs.* If relocation occurs after the Commencement Date, then Landlord shall pay Tenant's reasonable third party costs of moving Tenant's furnishings, telephone and computer wiring, and other property to the Substitute Premises, and reasonable printing and information technology costs associated with the change of address.



d. *Lease Term*. Except as provided herein, Tenant agrees that all of the obligations of this Lease, including the payment of Rent (to be determined on a per rentable square foot basis and applied to the Substitute Premises but in no event shall the Rent (including Base Rent and Additional Rent) exceed that for the Premises), will continue despite Tenant's relocation to the Substitute Premises. Upon substantial completion of the Substitute Premises, this Lease will apply to the Substitute Premises as if the Substitute Premises had been the space originally described in this Lease.

27. **BROKER'S COMMISSIONS**. Each party represents and warrants to the other that it has not dealt with any real estate broker, finder or other person with respect to this Lease in any manner, except the Broker identified in Section 1m and Landlord shall pay the fees of such Broker pursuant to Landlord's separate agreement with the Broker. Each party shall indemnify and hold the other party harmless from any and all damages resulting from claims that may be asserted against the other party by any other broker, finder or other person (including, without limitation, any substitute or replacement broker claiming to have been engaged by indemnifying party in the future), claiming to have dealt with the indemnifying party in connection with this Lease or any amendment or extension hereto, or which may result in Tenant leasing other or enlarged space from Landlord. The provisions of this paragraph shall survive the termination of this Lease.

28. **ANTI-TERRORISM LAWS**. During the term, neither Tenant nor to Tenant's knowledge after due inquiry, its respective constituents or affiliates shall (i) be an "enemy" or an "ally of the enemy" within the meaning of Section 2 of the Trading with the Enemy Act of the United States of America (50 U.S.C. App. §§ 1 et seq.), as amended, (ii) violate the Trading with the Enemy Act, as amended, (iii) violate any of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto or (iv) violate the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Patriot Act"). Tenant shall, promptly following a request from Landlord, provide all documentation and other information that the Lender requests in order to comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act.

29. **GENERAL PROVISIONS/DEFINITIONS**.

a. *No Agency*. Tenant is not and shall never represent itself to be an agent of Landlord, and Tenant acknowledges that Landlord's title to the Building is paramount, and that Tenant can do nothing to affect or impair Landlord's title.

b. *Force Majeure*. The term "force majeure" means: fire, flood, extreme weather, labor disputes, strike, lock-out, riot, government interference (including regulation, appropriation or rationing), unusual delay in governmental permitting, unusual delay in deliveries or unavailability of materials, unavoidable casualties, Act of God, or other causes beyond the party's reasonable control.

c. *Building Standard Improvements.* The term “Building Standard Improvements” shall mean the standards for normal construction of general office space within the Building as specified by Landlord, including design and construction standards, electrical load factors, materials, fixtures and finishes.

d. *Limitation on Damages.* Notwithstanding any other provisions in this Lease, neither Landlord nor Tenant shall be liable to the other for any special, consequential, incidental or punitive damages.

e. *Satisfaction of Judgments Against Landlord.* If Landlord, or its employees, officers, directors, stockholders or partners are ordered to pay Tenant a money judgment because of Landlord’s default under this Lease, said money judgment may only be enforced against and satisfied out of: (i) Landlord’s interest in the Building in which the Premises are located including the rental income and proceeds from sale; and (ii) any insurance or condemnation proceeds received because of damage or condemnation to, or of, said Building that are available for use by Landlord. No other assets of Landlord or said other parties exculpated by the preceding sentence shall be liable for, or subject to, any such money judgment.

f. *Interest.* Should Tenant fail to pay any amount due to Landlord within 30 days of the date such amount is due (whether Base Rent, Additional Rent, or any other payment obligation), then the amount due shall thereafter accrue interest at the rate of twelve percent (12%) per annum, compounded monthly, or the highest permissible rate under applicable usury law, whichever is less, until the amount is paid in full.

g. *Legal Costs.* Should either party prevail in any legal proceedings against the other for breach of any provision in this Lease, then the other party shall be liable for the costs and expenses of the prevailing party, including its reasonable attorneys’ fees (at all tribunal levels).

h. *Sale of Premises or Building.* Landlord may sell the Premises or the Building without affecting the obligations of Tenant hereunder. Upon the sale of the Premises or the Building, Landlord shall be relieved of all responsibility for the Premises and shall be released from any liability thereafter accruing under this Lease provided that Landlord’s successor in interest has assumed in writing all obligations of Landlord under the Lease.

i. *Time of the Essence.* Time is of the essence in the performance of all obligations under the terms of this Lease.

j. *Transfer of Security Deposit.* If any Security Deposit or prepaid Rent has been paid by Tenant, Landlord may transfer the Security Deposit or prepaid Rent to Landlord’s successor and upon such transfer and acknowledgment to Tenant of such successor’s receipt thereof, Landlord shall be released from any liability for return of the Security Deposit or prepaid Rent.

k. *Tender of Premises.* The delivery of a key or other such tender of possession of the Premises to Landlord or to an employee of Landlord shall not operate as a termination of this Lease or a surrender of the Premises unless requested in writing by Landlord.

l. *Tenant's Financial Statements.* Upon request of Landlord, Tenant agrees to furnish to Landlord copies of Tenant's most recent annual, quarterly and monthly financial statements, audited if available. The financial statements shall be prepared in accordance with generally accepted accounting principles, consistently applied. The financial statements shall include a balance sheet and a statement of profit and loss, and the annual financial statement shall also include a statement of changes in financial position and appropriate explanatory notes. Landlord may deliver the financial statements to any prospective or existing mortgagee or purchaser of the Building.

m. *Recordation.* This Lease may not be recorded without Landlord's prior written consent, but Tenant and Landlord agree, upon the request of the other party, to execute a memorandum hereof for recording purposes.

n. *Partial Invalidity.* The invalidity of any portion of this Lease shall not invalidate the remaining portions of the Lease.

o. *Binding Effect.* This Lease shall be binding upon the respective parties hereto, and upon their heirs, executors, successors and assigns.

p. *Entire Agreement; Construction.* This Lease supersedes and cancels all prior negotiations between the parties, and no changes shall be effective unless in writing signed by both parties. Landlord and Tenant acknowledge and agree that neither party has relied upon any statements, representations, agreements or warranties except those expressed in this Lease, and that this Lease contains the entire agreement of the parties hereto with respect to the subject matter hereof. The fact that one of the parties to this Lease may be deemed to have drafted or structured any provision of this Lease shall not be considered in construing or interpreting any particular provision of this Lease, either in favor of or against such party, and Landlord and Tenant hereby waive any applicable rules of construction or interpretation to the contrary.

q. *Good Standing.* If requested by Landlord, Tenant shall furnish appropriate legal documentation evidencing the valid existence in good standing of Tenant, and the authority of any person signing this Lease to act for the Tenant.

r. *Choice of Law.* This Lease shall be interpreted and enforced in accordance with the laws of the State in which the Premises are located.

s. *Effective Date.* This Lease shall become effective as a contract only upon the execution and delivery by both Landlord and Tenant. The date of execution shall be entered on the top of the first page of this Lease by Landlord, and shall be the date on which the last party signed the Lease, or as otherwise may be specifically agreed by both parties. Such date, once inserted, shall be established as the final day of ratification by all parties to this Lease, and shall be the date for use throughout this Lease as the "Effective Date".

30. **SPECIAL CONDITIONS.** The following special conditions, if any, shall apply, and where in conflict with earlier provisions in this Lease shall control:

(a) *Existing Improvements.* To the extent of Landlord's rights therein, Landlord hereby conveys to Tenant any rights and interest that Landlord has in the following furniture, trade fixtures and equipment located in the 4301 Research Commons building as of the date of this Lease: (i) Eight (8) mobile benches, (ii) Five (5) storage shelves, and (iii) Two (2) water filtration units (collectively the "Existing Improvements"). Landlord shall deliver, and Tenant shall accept, the Existing Improvements "as is". Tenant's acceptance and use of the Existing Improvements will be at Tenant's sole risk, and Landlord makes no representation or warranties regarding the Existing Improvements, including, but not limited to, their condition, merchantability or fitness for a particular purpose. Furthermore, Landlord makes no representation regarding the ownership of the Existing Improvements and whether or not any third party has any claim or right to them.

(b) *Right of Refusal.* Landlord grants Tenant a right of refusal (the "Right of Refusal") for that certain space in the Building known as Suite 115, containing approximately 1,533 rentable square feet ("Refusal Space"), as shown on Exhibit A-1 to this Lease, on the following basis:

i. Landlord shall notify Tenant in writing if and when Landlord receives an acceptable third-party offer to lease any Refusal Space ("Landlord's Offer Notice"). Landlord's Offer Notice shall include the material business terms upon which the third party is willing to lease the Refusal Space. Following receipt of Landlord's Offer Notice, Tenant shall have five business days within which to deliver to Landlord notice of Tenant's election to exercise its Right of Refusal as to the Refusal Space ("Tenant's Acceptance Notice"). In order to exercise its Right of Refusal, Tenant must lease all of the Refusal Space and not only a portion thereof. Additionally, if Landlord's Offer Notice states that the third party offer is for space that is greater than but includes Refusal Space, then to exercise the Right of Refusal, Tenant must lease the entire space offered by Landlord and not just the Refusal Space. If Tenant does not timely deliver Tenant's Acceptance Notice to Landlord, it will be conclusively presumed that Tenant has waived its Right of Refusal as to the Refusal Space; provided, however, in the event the Refusal Space shall become vacant and available again during the Term, Tenant's Right of Refusal shall be reinstated on the terms set forth herein.

ii. The Refusal Space will be offered to Tenant under the same business terms upon which the third party is willing to lease the Refusal Space. Otherwise, the terms and conditions of this Lease shall apply to Tenant's lease of the Refusal Space. After exercise of the Right of Refusal, the parties will execute an amendment to the Lease evidencing the addition of the Refusal Space. Unless expressly waived by Landlord, Tenant's Right of Refusal is conditioned on: (a) Tenant not being in default under the Lease at the time of exercise of the Right of Refusal or on the date that Tenant's occupancy of the Refusal Space is scheduled to commence beyond any applicable cure period; (b) Tenant not having vacated or subleased more than 25% of the Premises or assigned its interest in the Lease at the time it exercises the Right of Refusal or on the date that Tenant's occupancy of the Refusal Space is scheduled to commence; and (c) Tenant's financial condition not having materially adversely changed since the Effective Date. Tenant's rights pursuant to this paragraph are personal to GI Therapeutics, Inc., and, upon an assignment by G1 Therapeutics, Inc. of its rights and interests under the Lease (other than to a permitted assignee pursuant to Section 17(b) of this Lease), this Section shall be null and void.

iii. Tenant only has the Right of Refusal if the Refusal Space is vacant and available. Tenant does not have the Right of Refusal upon the renewal or extension of an existing Lease, even if the Lease being extended or renewed does not contain an extension or renewal right.

31. **LANDLORDS REPRESENTATIONS AND WARRANTIES.** Landlord warrants that (i) it has full right and authority to lease the Premises upon the terms and conditions herein set forth; (ii) it has good and marketable title to the premises; (iii) the Premises is not subject to the lien of any deed of trust, mortgage or other similar encumbering instrument which is not subordinated to this Lease, unless Tenant has received a non-disturbance agreement from the holder of such lien; (iv) Landlord will put Tenant into complete and exclusive possession of the Premises free from all orders, restrictions, covenants, agreements, leases, easements, laws, codes, ordinances, regulations or decrees which would, in any way, prevent or inhibit the use of the Premises by Tenant as provided in Section 4 of this Lease, prevent or restrict the use of the access roads and passageways of the Premises by Tenant, its agents, employees or invitees; (v) the Premises will, at the time of delivery of possession by Landlord, be properly zoned for the operation of a office building in the Premises by Tenant; (vi) the Premises contains adequate parking facilities as required by applicable codes or ordinances for the Premises as constructed and operated in accordance with the provisions of this Lease; (vii) as of the date of this Lease, the Premises are in compliance with all applicable federal, state and local statutes, codes, ordinances and rules, including without limitation, those with respect to (1) hazardous substances and environmental regulations and (2) the Americans with Disabilities Act of 1990, as amended; (viii) the Premises, including all utilities and equipment necessary for operation of the Premises, has been constructed in a workmanlike manner and is in good condition at the commencement of the Lease term. This Section shall be in addition to any other warranties, express or implied, by Landlord or by third parties with respect to the premises or which otherwise may be created by law.

32. **ADDENDA AND EXHIBITS.** If any addenda and/or exhibits are noted below, such addenda and exhibits are incorporated herein and made a part of this Lease.

- a. **Lease Addendum Number One — “Work Letter”**
- b. **Lease Addendum Number Two — “Additional Rent — Operating Expenses and Taxes”**
- c. **Lease Addendum Number Three — “Option to Extend Lease Term”**
- d. **Exhibit A — Premises**
- e. **Exhibit A-1 — Refusal Space**
- f. **Exhibit B — Rules and Regulations**
- g. **Exhibit C — Commencement Agreement**
- h. **Exhibit D — Acceptance of Premises**

**[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY  
SIGNATURE BLOCKS ON NEXT PAGE]**

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease in four originals, all as of the day and year first above written.

TENANT:

**G1 THERAPEUTICS, INC.,**

a Delaware corporation

By: /s/ Thomas K. Laundon

Name: Thomas K. Laundon

Title: Secretary

Date: January 13, 2014

STATE OF NORTH CAROLINA

COUNTY OF DURHAM

I, the undersigned Notary Public, certify that the following person personally appeared before me this day and acknowledged that he voluntarily signed the foregoing instrument document for the purpose stated therein in the capacity indicated: as its (state title): Chief Financial Officer.

Date: 1/13/2014

/s/ Edward Sterling Thomton Notary Public  
My Commission Expires: 2/18/2018

LANDLORD:

**HIGHWOODS REALTY LIMITED PARTNERSHIP**

a North Carolina limited partnership

By: Highwoods Properties, Inc., its general partner

a Mar land corporation

By: /s/ Thomas S. Hill, III

Thomas S. Hill, III, Vice President and Division Manager

**LEASE ADDENDUM NUMBER ONE [TO BE DISCUSSED]**

**WORK LETTER.** This Lease Addendum Number One (the “First Addendum”) sets forth the rights and obligations of Landlord and Tenant with respect to space planning, engineering, final workshop drawings, and the construction and installation of any improvements to the Premises to be completed before the Commencement Date (“Tenant Improvements”). This First Addendum contemplates that the performance of this work will proceed in four stages in accordance with the following schedule: (i) preparation of a space plan; (ii) final design and engineering and preparation of final plans and working drawings; (iii) preparation by the Contractor (as hereinafter defined) of an estimate of the cost of the Tenant Improvements; (iv) submission and approval of plans by appropriate governmental authorities and construction and installation of the Tenant Improvements by the Commencement Date.

In consideration of the mutual covenants hereinafter contained, Landlord and Tenant do mutually agree to the following:

1. **Allowance.** Landlord agrees, at its sole cost and expense, to provide an allowance of up to \$8.00 per rentable square foot, to design, engineer, install, supply and otherwise to construct the Tenant Improvements in the Premises that will become a part of the Building (the “Allowance”); otherwise, Tenant is fully responsible for the payment of all costs in connection with the Tenant Improvements. Up to \$2.00 per rentable square foot of the Allowance may be applied to costs associated with furniture, fixture and equipment for the Premises (the “FF&E”). Tenant shall deliver to Landlord copies of paid invoices and any other reasonable documentation requested by Landlord evidencing the amount of Tenant’s out-of-pocket FF&E costs.

2. **Space Planning, Design and Working Drawings.** Tenant shall provide and designate architects and engineers licensed in State in which the Premises are located and reasonably acceptable to Landlord, which architects and engineers will complete construction and mechanical drawings and specifications as required to construct the Tenant Improvements. The architects and engineers shall comply with the following:

a. Attend a reasonable number of meetings with Tenant and Landlord’s agent to define Tenant requirements. Tenant shall provide one complete space plan prepared by Tenant’s architect in order to obtain Landlord’s approval of such space plan.

b. Complete construction drawings for Tenant’s partition layout, reflected ceiling grid, telephone and electrical outlets, keying, and finish schedule (subject to the limitation expressed in Section 4 below).

c. Complete building standard mechanical plans where necessary (for installation of air conditioning system and ductwork, and heating and electrical facilities) for the work to be done in the Premises.

d. All plans and working drawings for the construction and completion of the Premises (the “Plans”) shall be subject to Landlord’s prior written approval. Any changes or modifications Tenant desires to make to the Plans shall also be subject to Landlord’s prior approval. Landlord agrees that it will not unreasonably withhold its approval of the Plans, or of any changes or modifications thereof; provided, however, Landlord shall have sole and absolute discretion to approve or disapprove any improvements that will be visible to the exterior of the Premises, or which may affect the structural integrity of the Building. Any approval of the Plans by Landlord shall not constitute approval of any Delays caused by Tenant and shall not be deemed a waiver of any rights or remedies that may arise as a result of such Delays.

e. If Tenant makes any revisions to the space plan after it has been approved by both Landlord and Tenant, Tenant shall pay all additional costs and expenses incurred as a result of such revisions.

3. **Signage and Keying.** Door and/or directory signage and suite keying in accordance with building standards shall be provided and installed by Tenant.

4. **Work and Materials at Tenant’s Expense; Payment of Allowance.**

a. Tenant shall select Contractors licensed in State in which the Premises are located, to provide the work and materials to construct the Tenant Improvements; provided that Landlord shall first approve such Contractors, such approval not to be unreasonably withheld.

b. ALL WORK IS TO BE PERFORMED IN COMPLIANCE WITH LANDLORD'S CONSTRUCTION RULES, REGULATIONS AND SPECIFICATIONS ("CONSTRUCTION RULES"), A COPY OF WHICH HAS BEEN PROVIDED TO TENANT. IT IS TENANT'S RESPONSIBILITY TO MAKE SURE THAT ITS CONTRACTOR COMPLIES WITH ALL CONSTRUCTION RULES. IF TENANT HAS NOT RECEIVED A COPY OF THE CONSTRUCTION RULES, IT IS THE RESPONSIBILITY OF TENANT TO OBTAIN A COPY PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. FAILURE TO COMPLY WITH THE CONSTRUCTION RULES IS A DEFAULT UNDER THE LEASE.

c. Landlord shall participate with Tenant and the Contractor in the creation of a punchlist and the construction shall not be deemed completed until Landlord has accepted the final construction.

d. Tenant agrees that Tenant and its contractor and anyone acting on behalf of its contractor or Tenant shall comply with any of Landlord's requests that pertain to protecting the Building and the rights of other tenants to enjoyment of their leased space.

e. Tenant shall pay Landlord a fee in an amount not to exceed three percent (3%) of the cost of the Work (excluding architectural and engineering fees) to reimburse Landlord for its costs and expenses in monitoring construction of the Tenant Improvements to assure they are being constructed in accordance with the approved Plans. This fee may be deducted from the Allowance by Landlord.

f. Periodically during the construction of the Tenant Improvements but in no event more than once every two (2) weeks, Tenant shall deliver to Landlord (i) partial releases of lien from all contractors, subcontractors and materialmen performing any work or providing any materials or the Tenant Improvements, and from any lienors giving notice required under law, and (ii) a request for payment in the total amount of documented costs. Upon satisfaction of the foregoing requirements, Landlord shall pay to Tenant the amount requested and documented pursuant to (i) hereinbefore up to the amount of the Allowance less a ten percent (10%) retainage.

g. Upon completion of the Tenant Improvements and within five (5) days after demand by Landlord, Tenant shall deliver to Landlord (i) final releases of lien from all contractors, subcontractors and materialmen performing any work or providing any materials for the Tenant Improvements, and from any lienors giving notice required under law; (ii) a final contractor's affidavit from the general Contractor in accordance with applicable law; and (iii) any supporting documentation evidencing final completion and payment of the Tenant Improvements reasonably requested by Landlord. Upon satisfaction of all of the foregoing requirements, Landlord shall pay to Tenant the remaining Allowance (after giving credit for payments pursuant to Section 4(f) herein), if any.

5. **Commencement Date.** Landlord shall be deemed to have delivered possession of the Premises on the Possession Date set forth in Section 1b of the Lease, and the Commencement Date of the Lease shall not be delayed by reason of the non-completion of the Tenant Improvements or the failure to obtain a certificate of occupancy or a temporary certificate of occupancy.

6. **Materials and Workmanship.** Tenant covenants and agrees that all work performed in connection with the construction of the Premises shall be performed in a good and workmanlike manner and in accordance with all applicable laws and regulations and with the final approved Plans. Tenant agrees to exercise due diligence in completing the construction of the Premises.

1. 7. **Insurance; Indemnity.** Prior to entering the Premises or commencing construction, Tenant shall comply with all insurance provisions of the Lease. All waiver and indemnity provisions of the Lease shall apply upon Tenant's (or it's contractor's) entry of the Premises.



**LEASE ADDENDUM NUMBER TWO**

**ADDITIONAL RENT – OPERATING EXPENSES AND TAXES**

1. *Operating Expenses.* The term “Operating Expenses” shall mean all costs incurred by Landlord in the provision of services to tenants and in the operation, management, repair, replacement and maintenance of the Property (as defined below), including, but not limited to, insurance premiums, utilities, heat, air conditioning, janitorial service, labor, materials, supplies, equipment and tools, permits, licenses, inspection fees, salaries and other reasonable compensation of maintenance and management personnel (up to and including the level of Property Manager), management fees, and Common Area expenses. Notwithstanding the foregoing, Operating Expenses shall not include the following:

- (i) any ground lease rental;
- (ii) capital expenditures required by Landlord’s failure to comply with laws enacted on or before the date the Building’s temporary certificate of occupancy or the equivalent is validly issued; provided, however, the capital expenditures incurred by Landlord and required by laws enacted after the date the Building’s temporary certificate of occupancy or the equivalent is validly issued shall be amortized over the useful life of such capital expenditures, such amortization amount to be considered an Operating Expense;
- (iii) costs incurred by Landlord for the repair of damage to the Building, to the extent the Landlord is reimbursed by insurance proceeds;
- (iv) any costs associated with leasing or marketing space in the Building. Such costs should include tenant improvements, advertising, lease commissions, legal fees to negotiate the lease, space planning or marketing material;
- (v) interest, principal, points and fees on debts or amortization on any mortgage or mortgages or any other debt instrument encumbering the Building or the property on which the Building stands;
- (vi) Landlord’s general corporate overhead and general and administrative expenses, other than charges for property management and in-house labor provided for maintenance of the Building;
- (vii) electric power costs for which any tenant directly contracts with the local public service company;
- (viii) costs incurred in connection with upgrading the Building to comply with handicap, life, fire and safety codes in effect prior to the date the final certificate of occupancy for the Building is issued;
- (ix) tax penalties incurred as a result of Landlord’s failure to make payments when due;
- (x) costs arising from Landlord’s charitable or political contributions;
- (xi) costs arising from earthquake insurance to the extent coverage exceed the coverage carried by landlord of other buildings comparable to the Building;
- (xii) federal and state income and franchise taxes of Landlord or any other such taxes not in the nature of real estate taxes, except taxes on rent which shall be paid directly by Tenant or included in Operating Expenses;
- (xiii) costs of selling, financing, syndicating or hypothecating the interest of Landlord in the Building, or Park;
- (xiv) legal and other costs associated with the mortgaging, refinancing or sale of the Building or any interest therein;

- (xv) any costs and expenses related to or incurred in connection with disputes with tenants of the Building or any lender for the Building; and
- (xvi) salaries, wages or other compensation paid to officers or executives of Landlord above the level of director of asset management in their respective capacities.

2. *Capital Expenditures.* Notwithstanding anything contained herein to the contrary, Landlord may include in Operating Expenses the costs of the following capital improvements, amortized on a straight-line basis over their useful lives:

- a. Any capital improvements made in order to comply with any new laws, rules or regulations or any changes in existing laws, rules or regulations adopted by any governmental authority after the Commencement Date; and
- b. Any capital improvements that are designed primarily to promote and protect the health, safety and well being of the Property's occupants; and
- c. Any capital improvements that are designed primarily to reduce Operating Expenses, provided that the amortized amount of these capital items in any year will be equal to the estimated resulting reduction in Operating Expenses for the same year.

3. *Taxes.* The term "Taxes" shall mean any fees, charges or assessments related to the Property that are imposed by any governmental or quasi-governmental authority having jurisdiction over the Property, including, without limitation, ad valorem real property taxes; franchise taxes; personal property taxes; assessments, special or otherwise, imposed on the Property; payments in lieu of real estate taxes; sewer rents; transit taxes; and taxes based on rents. Taxes shall also include the reasonable costs incurred by Landlord in connection with any appeal for a reduction of taxes, including, without limitation, the costs of legal consultants, appraisers and accountants. Taxes shall not include any inheritance, estate, succession, transfer, gift, corporate, income or profit tax imposed upon Landlord.

4. *Property.* The term "Property" shall mean the Building and the improvements, equipment and systems situated therein; the Common Areas; and the real property upon which the Building and Common Areas are situated.

5. *Tenant's Proportionate Share.* The term "Tenant's Proportionate Share" shall mean **3.4434%** calculated by dividing the approximately 4,047 rentable square feet of the Premises by the approximately 117,530 net rentable square feet of the Building. To the extent any Operating Expenses and/or Taxes are related to the Building and one or more other buildings owned by Landlord or its affiliate, those Operating Expenses and/or Taxes shall be reasonably allocated by Landlord on an equitable prorata basis among all of the buildings to which those expenses are related; and Tenant's Proportionate Share of those expenses shall be calculated based only on the amount of those expenses allocated to the Building.

6. *Base Year for Operating Expenses.* With respect to calculating Tenant's Proportionate Share of Operating Expenses, the term "Base Year" shall mean the twelve-month period beginning on January 1, 2014 and ending on December 31, 2014.

7. *Base Year for Taxes.* With respect to calculating Tenant's Proportionate Share of Taxes, the term "Base Year" shall mean the real property tax year, beginning January 1, 2014 and ending on December 31, 2014.

8. *Payment of Additional Rent.* For the calendar year commencing on **January 1, 2015** and for each calendar year thereafter, Tenant shall pay to Landlord, as Additional Rent, the following amounts:

- a. Tenant's Proportionate Share of any increase in Operating Expenses above the amount incurred during the Base Year for Operating Expenses. If any service, for which the expense may be included in Operating Expenses, is not provided to all tenants of the Building, Landlord shall adjust the related expense as if the service was provided to all tenants. Additionally, for any period in which the occupancy of the rentable area of the Building is less than 95%, those portions of Operating Expenses that vary based on occupancy will be adjusted for the period as if the Building was at 95% occupancy; and
- b. Tenant's Proportionate Share of any increase in Taxes above the amount incurred during the Base Year for Taxes.

c. Notwithstanding any provision herein to the contrary, Landlord hereby agrees that except for Taxes, insurance, utilities and increases in expenses due to Acts of God or other events of *force majeure* (collectively, "Uncontrollable Expenses"), the Operating Expenses for the Building shall not increase, on a cumulative and compound basis, by more than eight percent (8%) per annum for purposes of calculating Tenant's Proportionate Share. Tenant shall pay the full amount of Tenant's Proportionate Share of increases in Uncontrollable Expenses.

9. *Landlord's Estimate.* For the calendar year commencing on **January 1, 2015** and for each calendar year thereafter during the Term, Landlord shall deliver to Tenant a written statement of the reasonable estimated increase in both Operating Expenses and Taxes for that calendar year above the Operating Expenses and Taxes incurred during the applicable Base Year. Based on Landlord's estimate, Tenant shall pay to Landlord Tenant's Proportionate Share of the estimated increases in both Operating Expenses and Taxes in twelve equal monthly installments, which shall be due and payable at the same time and in the same manner as Base Rent.

10. *Annual Reconciliation.* Within 180 days after the end of each calendar year or as soon as possible thereafter, Landlord shall send Tenant an annual statement of the actual Operating Expenses and Taxes for the preceding calendar year (the "Annual Statement"). Landlord's failure to render an Annual Statement for any calendar year shall not prejudice Landlord's right to issue an Annual Statement with respect to that calendar year or any subsequent calendar year, nor shall Landlord's rendering of an incorrect Annual Statement prejudice Landlord's right subsequently to issue a corrected Annual Statement. Pursuant to the Annual Statement, Tenant shall pay to Landlord Additional Rent as owed within thirty days after Tenant's receipt of the Annual Statement, or Landlord shall adjust Tenant's Rent payments if Landlord owes Tenant a credit. After the Expiration Date or earlier termination date of the Lease, Landlord shall send Tenant the final Annual Statement for the Term, and Tenant shall pay to Landlord Additional Rent as owed within thirty days after Tenant's receipt of the Annual Statement, or, if Landlord owes Tenant a credit, then Landlord shall pay Tenant a refund. If this Lease expires or terminates on a day other than December 31, then Additional Rent shall be prorated on a 365-day calendar year (or 366 if a leap year). If there is a decrease in Operating Expenses in any subsequent year below Operating Expenses for the Base Year, then no Additional Rent shall be due on account of Operating Expenses; provided, however, Tenant shall not be entitled to any credit, refund or other payment that would reduce the amount of Tenant's Proportionate Share of Taxes or other Additional Rent or Base Rent owed by Tenant. Likewise, if there is a decrease in Taxes in any subsequent year below Taxes for the Base Year, then no Additional Rent shall be due on account of Taxes; provided, however, Tenant shall not be entitled to any credit, refund or other payment that would reduce the amount of Tenant's Proportionate Share of Operating Expenses or other Additional Rent or Base Rent owed by Tenant.

11. *Tenant's Review of Operating Expenses and Taxes.* No more than once per calendar year, Tenant, or a qualified professional selected by Tenant (the "Reviewer"), may review Landlord's books and records relating to Operating Expenses and Taxes (the "Review"), subject to the following terms and conditions:

a. Tenant must deliver notice of the Review to Landlord within thirty days of Tenant's receipt of the Annual Statement. Thereafter, Tenant must commence and complete its Review within a reasonable time, not to exceed 180 days following Tenant's receipt of the Annual Statement. In order to conduct a Review, Tenant must not be in default under the Lease beyond any applicable cure period at the time it delivers notice of the Review to Landlord or at the time the Review commences. No subtenant shall have any right to conduct a Review, and no assigns shall conduct a Review for any period during which such assignee was not in possession of the Premises. If Tenant elects to have a Reviewer conduct the Review, the Reviewer must be an independent nationally or regionally recognized accounting firm that is not being compensated by Tenant on a contingency fee basis.

b. Tenant's Review shall only extend to Landlord's books and records specifically related to Operating Expenses and Taxes for the Property during the calendar year for which the Annual Statement was provided. Books and records necessary to accomplish any Review shall be retained for twelve months after the end of each calendar year, and, upon Landlord's receipt of Tenant's notice, shall be made available to Tenant to conduct the Review. The Review shall be conducted during regular business hours at either the Landlord's division office for the area in which the Premises are located or Landlord's home office in Raleigh, North Carolina, as selected by Landlord.

c. As a condition to the Review, Tenant and Tenant's Reviewer shall execute a written agreement providing that the Reviewer is not being compensated on a contingency fee basis and that all information obtained through the Review, as well as any compromise, settlement or adjustment reached as a result of the Review, shall be held

in strict confidence and shall not be revealed in any manner to any person except: (i) upon the prior written consent of the Landlord, which consent may be withheld in Landlord's sole discretion; (ii) if required pursuant to any litigation between Landlord and Tenant materially related to the facts disclosed by the Review; or (iii) if required by law. The written agreement may also set forth Landlord's reasonable procedures and guidelines for Tenant and Tenant's Reviewer to follow when conducting the Review.

d. If, after Tenant's Review, Tenant disputes the amount of Operating Expenses or Taxes set forth in the Annual Statement, Tenant or Tenant's Reviewer shall submit a written report to Landlord within thirty days after the completion of the Review setting forth any claims to be asserted against Landlord as a result of the Review and specific and detailed explanations as to the reason for the claim(s) (the "Report"). Landlord and Tenant then shall use good faith efforts to resolve Tenant's claims set forth in the Report. If the parties do not reach agreement on the claims within thirty (30) days after Landlord's receipt of the Report, then the dispute shall be submitted to arbitration as hereinafter provided. Within twenty days after expiration of the thirty-day period referenced in the foregoing sentence, each party shall appoint as an arbitrator a reputable independent nationally or regionally recognized accounting firm with at least ten years experience in accounting related to commercial lease transactions and shall give notice of such appointment to the other party; provided, however, if Tenant used a Reviewer to perform the Review, the Reviewer shall be deemed to have been appointed by Tenant as its arbitrator for purposes of this provision. Within ten days after appointment of the second arbitrator, the two arbitrators shall appoint a third arbitrator who shall be similarly qualified. If the two arbitrators are unable to agree timely on the selection of the third arbitrator, then either arbitrator on behalf of both, may request such appointment from the office of the American Arbitration Association ("AAA") nearest to Landlord. The arbitration shall be conducted in accordance with the rules of the AAA. If the AAA shall cease to provide arbitration for commercial disputes in location, the third arbitrator shall be appointed by any successor organization providing substantially the same services. Within ten days after the third arbitrator has been selected, each of the other two arbitrators, on behalf of the party it represents, shall submit a written statement, along with any supporting document, data, reports or other information, setting forth its determination of the amount of Operating Expenses or Taxes that are in dispute. **The third arbitrator will resolve the dispute by selecting the statement of one of the parties as submitted to the third arbitrator.** Within ten days after the third arbitrator's receipt of the statements from the other arbitrators, the third arbitrator shall notify both parties in writing of the arbitrator's decision. The decision of the third arbitrator shall be final and binding upon the parties and their respective heirs, executors, successors and assigns. If either of the parties fails to furnish its statement to the third arbitrator within the time frame specified herein, the third arbitrator shall automatically adopt the other party's statement as final and binding. The cost of arbitration (exclusive of each party's witness and attorneys' fees, which shall be paid by the party) shall be shared equally by the parties.

e. If the Review or subsequent arbitration determines that Operating Expenses and Taxes in the applicable calendar year were overstated, in the aggregate, by five percent (5%) or more, then Landlord shall reimburse Tenant for Tenant's reasonable Review costs; otherwise, Tenant shall pay its own costs in connection with the Review.

LEASE ADDENDUM NUMBER THREE

OPTION TO EXTEND LEASE TERM

1. *Option to Extend.* Tenant shall have the right and option to extend the Lease (the "Extension Option") for two (2) additional period(s) of three (3) years each (the "Extended Lease Terms") (a separate notice is required for each Extended Lease Term); provided, however, such Extension Option is contingent upon the following (i) Tenant is not in default beyond any applicable cure period at the time Tenant gives Landlord notice of Tenant's intention to exercise the Extension Option; (ii) upon the Expiration Date or the expiration of any Extended Lease Term, Tenant has no outstanding default beyond any applicable cure period; (iii) intentionally deleted; (iv) Tenant is not disqualified by multiple defaults as provided in the Lease; and (v) Tenant is occupying the Premises. Following the expiration of the second Extended Lease Term, Tenant shall have no further right to renew the Lease pursuant to this Lease Addendum Number Three.

2. *Exercise of Option.* Tenant shall exercise each Extension Option by giving Landlord notice at least 180 days prior to the Expiration Date or the last day of any Extended Lease Term. If Tenant fails to give such notice to Landlord prior to said 180 day period, then Tenant shall forfeit the Extension Option. If Tenant exercises the Extension Option, then during any such Extended Lease Term, Landlord and Tenant's respective rights, duties and obligations shall be governed by the terms and conditions of the Lease. Time is of the essence in exercising the Extension Option.

3. *Term.* If Tenant exercises the Extension Option, then during any such Extended Lease Term, all references to the term "Term", as used in the Lease, shall mean the "Extended Lease Term".

4. *Termination of Extension Option on Transfer by Tenant.* In the event Landlord consents to an assignment or sublease by Tenant, then the Extension Option shall automatically terminate unless otherwise agreed in writing by Landlord.

5. *Base Rent for Extended Lease Term.* The Minimum Base Rent for the Extended Lease Term shall be the Fair Market Rental Rate, determined as follows:

Definition. The term "Fair Market Rental Rate" shall mean the market rental rate for the time period such determination is being made for office space in comparable office buildings in the Research Triangle Park, North Carolina area ("AREA") of comparable condition for space of equivalent quality, size, utility, and location. Such determination shall take into account all relevant factors, including, without limitation, the following matters: the credit standing of Tenant; the length of the term; expense stops; the fact that Landlord will experience no vacancy period and that Tenant will not suffer the costs and business interruption associated with moving its offices and negotiating a new lease; construction allowances and other tenant concessions that would be available to tenants comparable to Tenant in the AREA (such as moving expense allowance, free rent periods, and lease assumptions and take-over provisions, if any, but specifically excluding the value of improvements installed in the Premises at Tenant's cost), and whether adjustments are then being made in determining the rental rates for extended lease terms in the AREA because of concessions being offered by Landlord to Tenant (or the lack thereof for the Extended Lease Term in question). For purposes of such calculation, it will be assumed that Landlord is paying a representative of Tenant a brokerage commission in connection with the Extended Lease Term in question, based on the then current market rates.

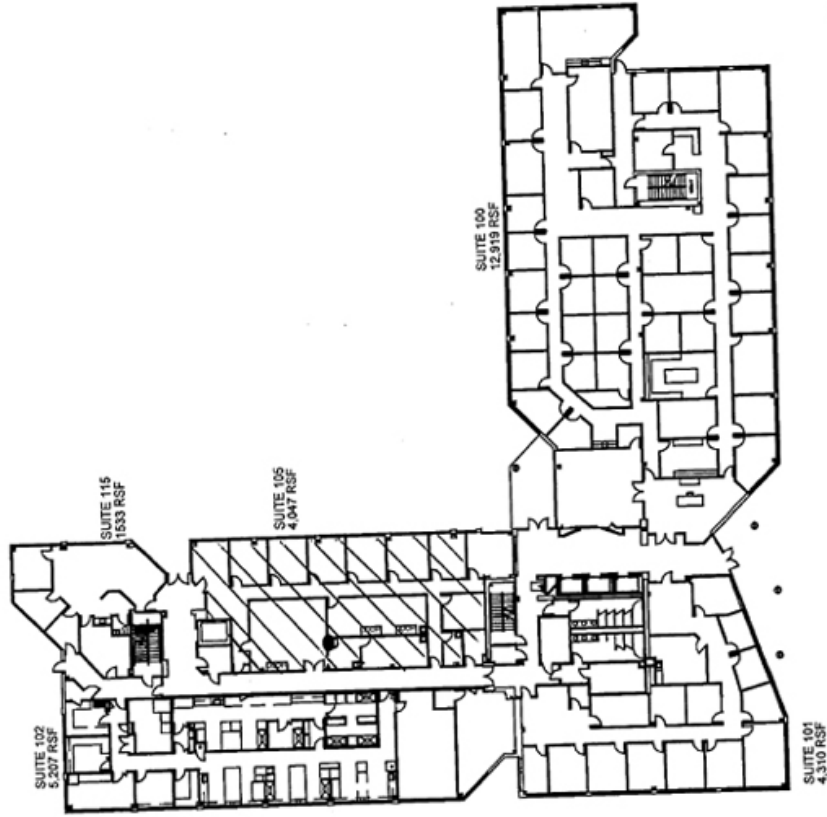
Determination. Landlord shall deliver to Tenant notice of the Fair Market Rental Rate (the "FMR Notice") for the Premises for the Extended Lease Term in question within thirty (30) days after Tenant exercises the option giving rise for the need to determine the Fair Market Rental Rate. If Tenant disagrees with Landlord's assessment of the Fair Market Rental Rate specified in a FMR Notice, then it shall so notify Landlord in writing within ten (10) business days after delivery of such FMR Notice; otherwise, the rate set forth in such notice shall be the Fair Market Rental Rate. If Tenant timely delivers to Landlord notice that Tenant disagrees with Landlord's assessment of the Fair Market Rental Rate, then Landlord and Tenant shall meet to attempt to determine the Fair Market Rental Rate. If Tenant and Landlord are unable to agree on such Fair Market Rental Rate within ten (10) business days after Tenant notifies Landlord of Tenant's disagreement with Landlord's assessment thereof, then Landlord and Tenant shall each appoint an independent real estate Broker with at least five (5) years' commercial real estate appraisal experience in the AREA market. The two Brokers shall then, within ten (10) days after their designation, select an independent third Broker with like qualifications. If the two Brokers are unable to agree on the third Broker within such ten (10) day period, either Landlord or Tenant, by giving five (5) days prior notice thereof to the other, may

apply to the then presiding Clerk of Superior Court of Wake County for selection of a third Broker who meets the qualifications stated above. Within twenty (20) business days after the selection of the third Broker, a majority of the Brokers shall determine the Fair Market Rental Rate. If a majority of the Brokers is unable to agree upon the Fair Market Rental Rate by such time, then the two (2) closest appraisals shall be averaged and the average will be the Fair Market Rental Rate. Tenant and Landlord shall each bear the entire cost of the Broker selected by it and shall share equally the cost of the third Broker.

Administration. If Tenant has exercised the Extension Option and the Fair Market Rental Rate for the Extended Lease Term has not been determined in accordance with this Lease Addendum Number Three by the time that Rent for the Extended Lease Term is to commence in accordance with the terms hereof, then Tenant shall pay Rent for the Extended Lease Term based on the Fair Market Rental Rate proposed by Landlord pursuant to this Lease Addendum Number Three until such time as the Fair Market Rental Rate has been so determined, at which time appropriate cash adjustments shall be made between Landlord and Tenant such that Tenant is charged Rent based on the Fair Market Rental Rate (as finally determined pursuant to this Lease Addendum Number Three) for the Extended Lease Term during the interval in question.

01 Research Commons  
1 T. W. Alexander Drive  
Research Triangle Park, NC 27709  
Tel: 919.872.4924

First Floor

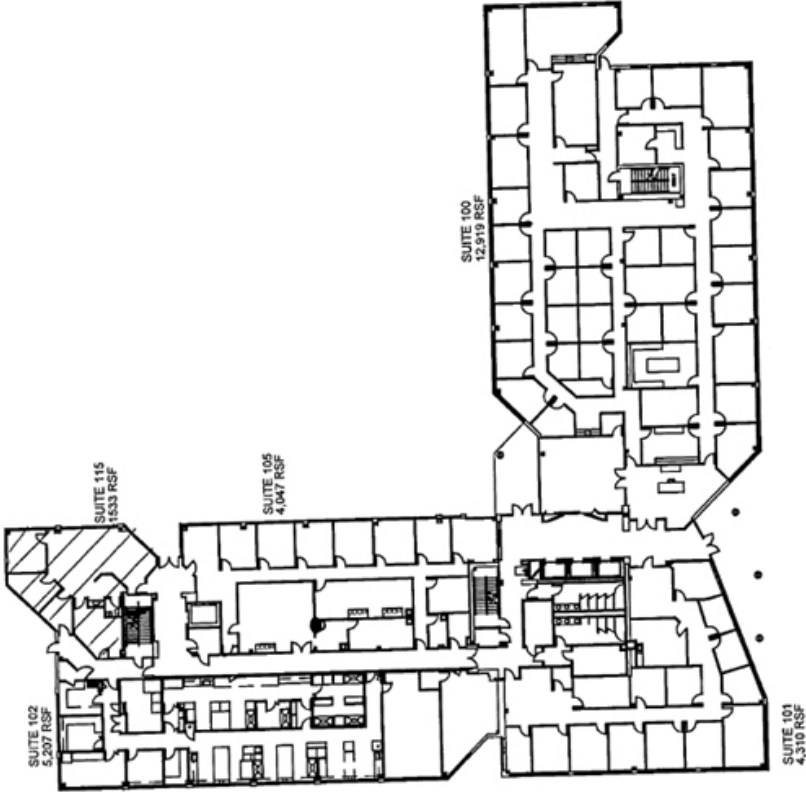


Disclaimer: The above floor plans are not to scale.  
The available space shown is believed to be correct but is subject to change.

EXHIBIT A-1  
REFUSAL SPACE

1401 Research Commons  
79 T. W. Alexander Drive  
Research Triangle Park, NC 27709  
Tel: 919.872.4924

First Floor



Disclaimer: The above floor plans are not to scale.  
The available space shown is believed to be correct but is subject to change.



**EXHIBIT B**  
**RULES AND REGULATIONS**

1. **Access to Building.** On Saturdays, Sundays, legal holidays and weekdays between the hours of 6:00 P.M. and 8:00 A.M., access to the Building and/or to the halls, corridors, elevators or stairways in the Building may be restricted and access shall be gained by use of a key or electronic card to the outside doors of the Buildings. Landlord may from time to time establish security controls for the purpose of regulating access to the Building. Tenant shall be responsible for providing access to the Premises for its agents, employees, invitees and guests at times access is restricted, and shall comply with all such security regulations so established.

2. **Protecting Premises.** The last member of Tenant to leave the Premises shall close and securely lock all doors or other means of entry to the Premises and shut off all lights and equipment in the Premises.

3. **Building Directories.** The directories for the Building in the form selected by Landlord shall be used exclusively for the display of the name and location of tenants. Any additional names and/or name change requested by Tenant to be displayed in the directories must be approved by Landlord and, if approved, will be provided at the sole expense of Tenant.

4. **Large Articles.** Furniture, freight and other large or heavy articles may be brought into the Building only at times and in the manner designated by Landlord and always at Tenant's sole responsibility. All damage done to the Building, its furnishings, fixtures or equipment by moving or maintaining such furniture, freight or articles shall be repaired at Tenant's expense.

5. **Signs.** Tenant shall not paint, display, inscribe, maintain or affix any sign, placard, picture, advertisement, name, notice, lettering or direction on any part of the outside or inside of the Building, or on any part of the inside of the Premises which can be seen from the outside of the Premises, including windows and doors, without the written consent of Landlord, and then only such name or names or matter and in such color, size, style, character and material as shall be first approved by Landlord in writing. Landlord, without notice to Tenant, reserves the right to remove, at Tenant's expense, all matters other than that provided for above.

6. **Compliance with Laws.** Tenant shall comply with all applicable laws, ordinances, governmental orders or regulations and applicable orders or directions from any public office or body having jurisdiction, whether now existing or hereinafter enacted with respect to the Premises and the use or occupancy thereof. Tenant shall not make or permit any use of the Premises which directly or indirectly is forbidden by law, ordinance, governmental regulations or order or direction of applicable public authority, which may be dangerous to persons or property or which may constitute a nuisance to other tenants.

7. **Hazardous Materials.** Tenant shall not use or permit to be brought into the Premises or the Building any flammable oils or fluids, or any explosive or other articles deemed hazardous to persons or property, or do or permit to be done any act or thing which will invalidate, or which, if brought in, would be in conflict with any insurance policy covering the Building or its operation, or the Premises, or any part of either, and will not do or permit to be done anything in or upon the Premises, or bring or keep anything therein, which shall not comply with all rules, orders, regulations or requirements of any organization, bureau, department or body having jurisdiction with respect thereto (and Tenant shall at all times comply with all such rules, orders, regulations or requirements), or which shall increase the rate of insurance on the Building, its appurtenances, contents or operation.

8. **Defacing Premises and Overloading.** Tenant shall not place anything or allow anything to be placed in the Premises near the glass of any door, partition, wall or window that may be unsightly from outside the Premises. Tenant shall not place or permit to be placed any article of any kind on any window ledge or on the exterior walls; blinds, shades, awnings or other forms of inside or outside window ventilators or similar devices shall not be placed in or about the outside windows in the Premises except to the extent that the character, shape, color, material and make thereof is approved by Landlord. Tenant shall not do any painting or decorating in the Premises or install any floor coverings in the Premises or make, paint, cut or drill into, or in any way deface any part of the Premises or Building without in each instance obtaining the prior written consent of Landlord. Tenant shall not overload any floor or part thereof in the Premises, or any facility in the Building or any public corridors or elevators therein by bringing in or removing any large or heavy articles and Landlord may direct and control the location of safes, files, and all other heavy articles and, if considered necessary by Landlord may require Tenant at its expense to supply whatever supplementary supports necessary to properly distribute the weight.

**9. Obstruction of Public Areas.** Tenant shall not, whether temporarily, accidentally or otherwise, allow anything to remain in, place or store anything in, or obstruct in any way, any sidewalk, court, hall, passageway, entrance, or shipping area. Tenant shall lend its full cooperation to keep such areas free from all obstruction and in a clean and slightly condition, and move all supplies, furniture and equipment as soon as received directly to the Premises, and shall move all such items and waste (other than waste customarily removed by Building employees) that are at any time being taken from the Premises directly to the areas designated for disposal. All courts, passageways, entrances, exits, elevators, escalators, stairways, corridors, halls and roofs are not for the use of the general public and Landlord shall in all cases retain the right to control and prevent access thereto by all persons whose presence, in the judgment of Landlord, shall be prejudicial to the safety, character, reputation and interest of the Building and its tenants; provided, however, that nothing herein contained shall be construed to prevent such access to persons with whom Tenant deals within the normal course of Tenant's business so long as such persons are not engaged in illegal activities.

**10. Additional Locks.** Tenant shall not attach, or permit to be attached, additional locks or similar devices to any door or window, change existing locks or the mechanism thereof, or make or permit to be made any keys for any door other than those provided by Landlord. Upon termination of this Lease or of Tenant's possession, Tenant shall immediately surrender all keys to the Premises.

**11. Communications or Utility Connections.** If Tenant desires signal, alarm or other utility or similar service connections installed or changed, then Tenant shall not install or change the same without the approval of Landlord, and then only under direction of Landlord and at Tenant's expense. Tenant shall not install in the Premises any equipment which requires a greater than normal amount of electrical current for the permitted use without the advance written consent of Landlord. Tenant shall ascertain from Landlord the maximum amount of load or demand for or use of electrical current which can safely be permitted in the Premises, taking into account the capacity of the electric wiring in the Building and the Premises and the needs of other tenants in the Building, and Tenant shall not in any event connect a greater load than that which is safe.

**12. Office of the Building.** Service requirements of Tenant will be attended to only upon application at the office of Highwoods Properties, Inc. Employees of Landlord shall not perform, and Tenant shall not engage them to do any work outside of their duties unless specifically authorized by Landlord.

**13. Restrooms.** The restrooms, toilets, urinals, vanities and the other apparatus shall not be used for any purpose other than that for which they were constructed, and no foreign substance of any kind whatsoever shall be thrown therein. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by the Tenant whom, or whose employees or invitees, shall have caused it.

**14. Intoxication.** Landlord reserves the right to exclude or expel from the Building any person who, in the judgment of Landlord, is intoxicated, or under the influence of liquor or drugs, or who in any way violates any of the Rules and Regulations of the Building.

**15. Nuisances and Certain Other Prohibited Uses.** Tenant shall not (a) install or operate any internal combustion engine, boiler, machinery, refrigerating, heating or air conditioning apparatus in or about the Premises; (b) engage in any mechanical business, or in any service in or about the Premises or Building, except those ordinarily embraced within the Permitted Use as specified in Section 3 of the Lease; (c) use the Premises for housing, lodging, or sleeping purposes; (d) prepare or warm food in the Premises or permit food to be brought into the Premises for consumption therein (heating coffee and individual lunches of employees excepted) except by express permission of Landlord; (e) place any radio or television antennae on the roof or on or in any part of the inside or outside of the Building other than the inside of the Premises, or place a musical or sound producing instrument or device inside or outside the Premises which may be heard outside the Premises; (f) use any power source for the operation of any equipment or device other than dry cell batteries or electricity; (g) operate any electrical device from which may emanate waves that could interfere with or impair radio or television broadcasting or reception from or in the Building or elsewhere; (h) bring or permit to be in the Building any bicycle, other vehicle, dog (except in the company of a blind person), other animal or bird; (i) make or permit any objectionable noise or odor to emanate from the Premises; (j) disturb, harass, solicit or canvass any occupant of the Building; (k) do anything in or about the Premises which could be a nuisance or tend to injure the reputation of the Building; (i) allow any firearms in the Building or the Premises except as approved by Landlord in writing.

16. **Solicitation.** Tenant shall not canvass other tenants in the Building to solicit business or contributions and shall not exhibit, sell or offer to sell, use, rent or exchange any products or services in or from the Premises unless ordinarily embraced within the Tenant's Permitted Use as specified in Section 3 of the Lease.

17. **Energy Conservation.** Tenant shall not waste electricity, water, heat or air conditioning and agrees to cooperate fully with Landlord to insure the most effective operation of the Building's heating and air conditioning, and shall not allow the adjustment (except by Landlord's authorized Building personnel) of any controls.

18. **Building Security.** At all times other than normal business hours the exterior Building doors and suite entry door(s) must be kept locked to assist in security. Problems in Building and suite security should be directed to Landlord at (404) 321-6555.

19. **Parking.** Parking is in designated parking areas only. There shall be no vehicles in "no parking" zones or at curbs. Handicapped spaces are for handicapped persons only and the Police Department will ticket unauthorized (unidentified) cars in handicapped spaces. Landlord reserves the right to remove vehicles that do not comply with the Lease or these Rules and Regulations and Tenant shall indemnify and hold harmless Landlord from its reasonable exercise of these rights with respect to the vehicles of Tenant and its employees, agents and invitees.

20. **Janitorial Service.** The janitorial staff will remove all trash from trashcans. Any container or boxes left in hallways or apparently discarded unless clearly and conspicuously labeled DO NOT REMOVE may be removed without liability to Landlord. Any large volume of trash resulting from delivery of furniture, equipment, etc., should be removed by the delivery company, Tenant, or Landlord at Tenant's expense. Janitorial service will be provided after hours five (5) days a week. All requests for trash removal other than normal janitorial services should be directed to Landlord at (404) 321-6555.

21. **Construction.** Tenant shall make no structural or interior alterations of the Premises. All structural and nonstructural alterations and modifications to the Premises shall be coordinated through Landlord as outlined in the Lease. Completed construction drawings of the requested changes are to be submitted to Landlord or its designated agent for pricing and construction supervision.

**EXHIBIT C**  
**COMMENCEMENT AGREEMENT AND LEASE AMENDMENT NUMBER ONE**

This COMMENCEMENT AGREEMENT (the "Agreement"), made and entered into as of this                    day of                    , 20                    , by and                    between **HIGHWOODS REALTY LIMITED PARTNERSHIP**, a North Carolina limited partnership ("Landlord") and                    , a                    corporation ("Tenant");

**WITNESSETH:**

WHEREAS, Tenant and Landlord entered into that certain Lease Agreement dated                    (the "Lease"), for space designated as Suite                    , comprising approximately                    rentable square feet, in the                    Building, located at                    , City of                    , County of                    , State of                    ; and

WHEREAS, the parties desire to amend the Rent Schedule and further alter and modify said Lease in the manner set forth below,

NOW, THEREFORE, in consideration of the mutual and reciprocal promises herein contained, Tenant and Landlord hereby agree that said Lease hereinafter described be, and the same is hereby modified in the following particulars, effective as of                    :

1. *Lease Term.* The definition for "Term", provided in Section One of the Lease, entitled "Basic Definitions and Provisions" shall be amended to provide that the Commencement Date is:                    and the Expiration Date is:                    .
2. *Base Rent.* The definition for "Rent", provided in Section One of the Lease, entitled "Basic Definitions and Provisions", shall be amended as follows:
  - a. *Base Rent:* Subsection 1(e) entitled "Base Rent", is amended to provide that the Base Rent for the Term shall be \$                    , instead of \$                    .
  - b. *Rent Schedule:* The rent schedule provided in Subsection 1(e) shall be replaced with the following rent schedule:
3. *Miscellaneous.* Unless otherwise defined herein, all capitalized terms used in this First Amendment shall have the same definitions ascribed to them in the Lease.
4. *Lease Effectiveness.* Except as modified and amended by this First Amendment, the Lease shall remain in full force and effect.

[BALANCE OF PAGE LEFT INTIONALLY BLANK;  
SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, Landlord and Tenant have caused this Agreement to be duly executed, as of the day and year first above written.

Tenant:

**G1 THERAPEUTICS, INC.**

a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Landlord:

**HIGHWOODS REALTY LIMITED PARTNERSHIP**

a North Carolina limited partnership

By: Highwoods Properties, Inc., its general partner  
a Maryland corporation

By: \_\_\_\_\_  
Thomas S. Hill, III, Vice President and  
Division Manager

**EXHIBIT D**  
**JANITORIAL SPECIFICATIONS**

**NIGHTLY SERVICES**

1. Empty all wastebaskets and trash cans.
2. Replace trash liners as needed. All interior trash receptacles should be fitted with a liner.
3. Empty and damp clean all ashtrays and ash urns.
4. Place trash in plastic bags or equivalent containers, seal containers, and dispose of properly.
5. Dust exposed filing cabinets, desks, tables, and chairs with treated cloths.
6. Dust accessible fixtures, directories and ledges with treated cloths.
7. When specifically requested by tenant, damp clean blackboards or liquid marker boards. Chalk and marker trays or ledges should be cleaned as needed.
8. Clean interior and exterior of all elevators. This includes polishing stainless steel panels, if applicable, cleaning threshold track, and properly maintaining elevator carpets.
9. Clean, polish, and disinfect drinking fountains.
10. Consistently control appearance, sanitation, and odor of restrooms. Specifically, sweep then mop floors with proper germicide (replacing mop water as needed); clean, disinfect and deodorize all sinks, urinals, toilets and toilet seat (both sides); clean mirrors; polish all bright metal; using proper disinfectant, wipe down all toilet partitions and adjacent walls, clean formica counter tops; and restock all restroom supplies to adequate capacity.
11. Spot clean doors, walls, and woodwork.
12. Spot mop all hard surface floors and dust, mop or sweep entire hard surface floor area.
13. Sweep or vacuum walk-off mats.
14. Vacuum all carpeted areas and spot clean as necessary.
15. Wipe down stairway rails and properly clean steps and landings.
16. Thoroughly clean vending areas, floors and walls.
17. Sweep and police entryways (defined as areas within twenty feet of all entrances). Pick up cigarette butts and trash beside entrances.
18. Clean all entrance, door, and office partition glass.
19. Vacuum, mop or sweep, as applicable, all lobby and foyer areas. NOTE: Damp mop hard tile surfaces.
20. Leave office and furniture in neat, orderly fashion.

**WEEKLY SERVICES**

1. Detail vacuum and/or dust all corners, chair rungs, edges and baseboards in tenant and common areas.
2. Vacuum and/or high dust ledges, sills, moldings and door, picture and window frames.

**EXHIBIT E**

**ACCEPTANCE OF PREMISES**

Tenant: \_\_\_\_\_

Landlord \_\_\_\_\_

Date Lease Signed: \_\_\_\_\_

Term of Lease: \_\_\_\_\_ Months

\_\_\_\_\_

Address of Leased Premises

Suite: \_\_\_\_\_ Containing approximately \_\_\_\_\_ square feet, located at

Commencement Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

The above described Premises are accepted by Tenant as suitable for the purpose for which they were let. The above described lease term commences and expires on the dates set forth above. Tenant acknowledges that on \_\_\_\_\_ it received from Landlord \_\_\_\_\_ keys to the Premises. It is understood that if there is a punch list which will be completed after move-in, then said punch list will be an exhibit hereto.

**TENANT**

\_\_\_\_\_  
(Type/Print Name of Tenant)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Type/Print Name and Title)

**LANDLORD**

\_\_\_\_\_  
(Type/Print Name of Landlord)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Type/Print Name and Title)

**CONFIDENTIAL TREATMENT REQUESTED****EXCLUSIVE LICENSE AGREEMENT**

This Exclusive License Agreement (this “**Agreement**”), effective as of November 23, 2016 (“**Effective Date**”) between The Board Of Trustees Of The University Of Illinois, a body corporate and politic of the State of Illinois, 352 Henry Administration Building, 506 S. Wright St., Urbana, Illinois 61801 (“**University**”) and G1 Therapeutics, Inc. having a principal address at 79 T.W. Alexander Drive, 4401 Research Commons, Suite 105, Research Triangle Park, NC 27709 (“**Licensee**”).

University holds certain exclusive rights to the technology claimed in the Patent Rights and the Technical Information (as such terms are defined below) and desires to have the rights exploited for commercial purposes for the public benefit.

Licensee wishes to obtain the exclusive license to the Patent Rights and the non-exclusive license to the Technical Information for such commercial purposes.

Therefore, in consideration of the obligations set forth below, University and Licensee hereby agree as follows.

**ARTICLE 1 - DEFINITIONS**

“**Affiliate**” means any entity that directly or indirectly controls, is controlled by, or is under common control with Licensee. For purposes of the preceding sentence, “**control**” means the right to control, or actual control of, the management of the entity, whether by ownership of securities, by voting rights, by agreement or otherwise. While an entity is entitled to the benefits of an Affiliate under this Agreement for only the period of time the entity qualifies as an Affiliate under this definition, all obligations under this Agreement that accrued to the entity while an Affiliate shall survive until fulfilled even though the entity no longer qualifies as an Affiliate.

“**Confidential Information**” means any information or material disclosed by one party, the “**disclosing party**” to the other party, the “**receiving party**” that is identified in writing as confidential at the time of disclosure or, if disclosed orally or observed, is identified as confidential at the time of disclosure or is summarized in a marked writing within forty-five days of disclosure, and is not information or material that is: (a) already known to receiving party at the time of disclosure as evidenced by receiving party’s written records; (b) in the public domain other than through acts or omissions of receiving party, or anyone that accessed the Confidential Information from receiving party; (c) lawfully disclosed without restriction to receiving party by a third party; or (d) independently developed by receiving party without knowledge of or access to the Confidential Information as evidenced by receiving party’s written records.

“**Field**” shall have the meaning set forth on Schedule 1.

“**First Commercial Sale**” means, with respect to a Product in any country, the first sale for monetary value for use or consumption by the end user of such Product in such country after the receipt of the Marketing Authorization for such Product has been obtained in such country. First Commercial Sale will not include a sale of a Product to an Affiliate, or sales of Products to be used for clinical trials or for compassionate use purposes.

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“including” means including, without limitation.

“License Year” means each successive one year term following the Effective Date.

“Market Exclusivity” means, with respect to a Product in a country, any exclusive marketing right, data exclusivity or other exclusivity status conferred by any Regulatory Authority with respect to such Product in such country, other than a Patent Right, that limits or prohibits a Third Party from (i) relying on pivotal safety or efficacy data generated by or for the Parties with respect to a Product in an application for Regulatory Approval of a product or (ii) commercializing a Product, including orphan drug protection and data exclusivity.

“Net Sales” means the gross invoice amounts for Product sold, transferred, practiced, performed or otherwise provided, less the following deductions, but only to the extent included in the invoiced amount and documented as solely attributable to the Product:

- (a) customary trade, quantity or cash discounts and rebates actually given (including discounts or rebates to governmental or managed care organizations);
- (b) refunds, replacements or credits given to purchasers for return of Product (including Medicare and other similar types of rebates); and
- (c) freight and other transportation costs, including insurance charges, and unreimbursed duties, tariffs, sales and excise taxes actually paid, excluding value-added taxes.

Net Sales on Product provided as part of a non-cash exchange or other than through an arms-length transaction shall mean the amount invoiced in an arms-length sale of the same or equivalent Product in substantially the same quantity, time and place as the non-cash transfer, and if no such sale as occurred, shall be the fair market value of the transferred Product(s).

If Licensee or its Affiliates sells any Product in the form of a combination product containing (i) a Product and (ii) one or more active ingredients having independent therapeutic effect or diagnostic utility that are not Products or a delivery device (each, an “Active Ingredient”) (whether such elements are combined in a single formulation and/or package, as applicable, or formulated and/or packaged separately but sold together for a single price) (a “Combination Product”), Net Sales of such Combination Product for the purpose of determining the royalty due to University pursuant to Section 3.3 will be calculated by multiplying actual Net Sales of such Combination Product by the fraction  $A/(A+B)$  where A is the invoice price of such Product if sold separately, and B is the total invoice price of the other Active Ingredient(s) and/or the delivery device in the combination if sold separately. If, on a country-by-country basis, such other Active Ingredient(s) or ingredients or delivery device in the Combination Product are not sold separately in such country, but the Product component of the Combination Product is sold separately in such country, Net Sales for the purpose of determining royalties due to University for the Combination Product shall be calculated by multiplying actual Net Sales of such Combination Product by the fraction  $A/C$  where A is the invoice price of such Product component if sold separately, and C is the invoice price of the Combination Product. If, on a country-by-country basis, such Product component is not sold separately in such country, Net Sales for the purposes of determining royalties due to University for the Combination Product shall be actual Net Sales multiplied by the fraction  $D/(D+E)$  where D is the fair market value of the portion of the Combination Product that contains the Product and E is the fair market value of the portion of the Combination Product containing the other Active Ingredient(s) included in such Combination Product, as such fair market values are determined in good faith by mutual agreement of Licensee and University, based upon commercially reasonable

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standards and available market information. For all determinations of royalties due on Combination Products, in no event shall the fraction (expressed as a percentage) used for purposes of determining royalties due to University for the Combination Product be less than (i) [\*\*\*] percent ([\*\*\*]%) with respect to any Combination Product with annual Net Sales of up to \$[\*\*\*]; and (ii) [\*\*\*] percent ([\*\*\*]%) with respect to any Combination Product with annual Net Sales in excess of \$[\*\*\*].

“**Patent Rights**” means: (a) the patents and patent applications listed on Schedule 1; (b) U.S., PCT and foreign patent applications claiming priority therefrom, including divisions and continuations; (c) patents issuing from any of the foregoing; and (d) reissues, renewals, re-examinations, substitutions or extensions thereof, and supplementary protection certificates referencing any of the foregoing, in each case only to the extent of the claimed subject matter that is fully disclosed and enabled by the disclosures in (a) of this definition to satisfy 35 U.S.C. §112.

“**Product(s)**” means any product or process: (a) claimed by the Patent Rights, or whose manufacture, use or production is claimed by the Patent Rights; (b) the development, manufacture, reproduction, performance, use, sale or importation of which is, incorporates, uses or is derived from any of the Technical Information; or (c) meeting the qualifications of both (a) and (b) of this definition.

“**Regulatory Authority**” means the U.S. Food and Drug Administration, European Medicines Agency or other similar regulatory body, agency or entity, and their respective successors anywhere in the world, that grants approvals, licenses, registrations or authorizations on behalf of any national, multi-national, regional, state or local agency, department, administration, bureau, fund, commission, council or other governmental entity necessary to test, make, market, distribute, use or sell products in its respective jurisdiction.

“**Royalty Period**” means each six (6) month period of a License Year. The final Royalty Period shall end on the date of termination or expiration of this Agreement.

“**Royalty Term**” means, for a Product and country in the Territory, the period commencing on the First Commercial Sale of such Product in such country and ending upon the later of (a) the expiration of the last Valid Claim within the Patent Rights covering the Product in such country, (b) the expiration of Market Exclusivity in such country, and (c) the 10<sup>th</sup> anniversary of the First Commercial Sale in such country.

“**Sublicense**” means any agreement, however captioned, and regardless of how the conveyances are referred to, or how the parties are referred to therein, in which Licensee directly or indirectly through privity of contract: (a) grants or otherwise conveys any of the rights licensed to it hereunder; (b) agrees not to assert any of the rights licensed to it hereunder; (c) has obtained the agreement of the other party thereto not to practice any right licensed to it hereunder; and/or (d) permits the making, offering for sale, using, selling and/or importing of Product.

“**Sublicensee**” means any third party, other than an Affiliate, to which a Sublicense is conveyed.

“**Sublicense Revenue**” means all remuneration paid to Licensee under a Sublicense, including all up-front license fees, milestone payments, maintenance fees or other sums, and the fair market value of any non-cash payments (as determined by a mutually-acceptable independent valuation company) and/or in kind transfers received by Licensee from a Sublicensee as

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consideration attributable to Sublicense under the rights granted to Licensee pursuant this Agreement. Notwithstanding the foregoing, Sublicense Revenue shall not include amounts Licensee receives from a Sublicensee as consideration (a) for rights to other intellectual property not attributable to a Sublicense under the rights granted to Licensee pursuant to Section 2.1, (b) in the form of royalties paid by Licensee to University hereunder based on Net Sales by Sublicensees, (c) for the loan or advance of funds, or repayment thereof, (d) for the supply of products or for research or other services provided by Licensee (including manufacturing or commercialization services), to the extent the payments do not exceed the fair market value of such services plus a reasonable margin consistent with industry practice, or (e) for the purchase of an equity interest in Licensee to the extent the purchase price does not exceed the then-fair market value of such equity (as determined by an independent valuation company selected in good faith by Licensee's Board of Directors and approved by University).

“**Technical Information**” means the information and/or material described on Schedule 1, and if provided in the form of biological materials, then including all progeny, modifications and/or derivatives of the materials made by or on behalf of Licensee and/or any Sublicensee.

“**Term**” means the period of time from the Effective Date until the last to expire Royalty Term.

“**Territory**” shall have the meaning set forth on Schedule 1.

“**Valid Claim**” means (a) a claim of an issued and unexpired patent within the Patent Rights that has not been (i) held permanently revoked, unenforceable, unpatentable or invalid by a decision of a court or governmental body of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, (ii) rendered unenforceable through disclaimer or otherwise, (iii) abandoned or (iv) permanently lost through an interference or opposition proceeding without any right of appeal or review; or (b) a pending claim of a pending patent application within the Patent Rights that (i) has been asserted and continues to be prosecuted in good faith, (ii) has not been abandoned or finally rejected without the possibility of appeal or refiling.

**ARTICLE 2 - GRANT OF LICENSE**

2.1. **Grant.** Subject to the terms and conditions of this Agreement and Licensee's continuing compliance therewith, University hereby grants and Licensee hereby accepts: (a) an exclusive, non-transferable license, with the right to sublicense, under the University's rights in the Patent Rights, to make, have made, use, import, sell, and offer for sale Products solely within the Field and within the Territory; and (b) a non-exclusive, non-transferable license, limited to the Field and the Territory, with the right to sublicense, to use the University's rights in the Technical Information to make and sell Products solely within the Field and within the Territory. Within thirty (30) days of the Effective Date, University shall provide Licensee with the Technical Information selected by University in its sole discretion to transfer as identified on Schedule 1 attached hereto, for Licensee to use solely as permitted in Section 2.1(b), which constitutes University's entire obligation to Licensee regarding the Technical Information. If the Technical Information includes tangible materials, then such Technical Information is provided in bailment to Licensee solely as permitted in Section 2.1(b), and nothing herein shall be construed as a sale thereof. Licensee shall notify University when all use of Technical Information ceases, and all rights to Technical Information granted in Section 2.1(b) shall revert to University as of the date of the notice.

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2.2. **Reservations.** University reserves all rights, titles and interests not expressly granted in Section 2.1, and the right to practice and have practiced the Patent Rights for non-profit purposes, including teaching, research and public service; provided, however, that, (a) University may not practice the Patent Rights in research conducted under funding from, or in collaboration with, a commercial entity if such commercial entity will receive rights to, or an option to license, intellectual property arising from such sponsorship or collaboration; (b) Licensee will provide University with written notice of each Product that Licensee includes in any clinical studies or other clinical activities; and (c) subject to subsection (b), University agrees not to conduct any clinical studies or other clinical activities involving such Product without the prior written consent of Licensee prior to first commercial sale of the Product. Nothing in this Agreement or a party's performance hereunder shall be construed as conferring, by implication, estoppel or otherwise, upon Licensee, any party in privity with Licensee, or any customer of any of the foregoing, any right, title or interest under any of University's intellectual or tangible property right at any time, except for those rights as expressly granted in Section 2.1. Nothing in this Agreement shall be construed as University granting any license under Patent Rights or Technical Information owned by any third party.

2.3. **Sublicenses.** Subject to the terms and conditions of this Agreement and Licensee's continuing compliance therewith, Licensee may grant Sublicenses provided each is: (a) in writing; (b) not transferable whether by assignment, delegation, sublicense or otherwise without University's consent; provided, that, any such Sublicensee may assign the Sublicense agreement to a successor in connection with the merger, consolidation or sale of all or substantially all of its assets or that portion of its business to which the Sublicense agreement relates and further provided that such successor entity agrees, in writing, to be bound to the terms of the Sublicense agreement (Licensee to provide such written to University promptly upon receipt); (c) on terms and conditions that are consistent with and not in conflict with this Agreement, and (d) no less protective of University's rights than those terms and conditions set forth herein, and create no additional obligation on University.. No Sublicense shall relieve Licensee of any of its obligations hereunder, and Licensee shall take all steps that may be reasonably necessary to enforce compliance by its Sublicensees with the terms and conditions of the respective Sublicense agreement to the extent required to allow Licensee to fully comply with all of its obligations under this Agreement. For clarity, any Affiliate desiring to exercise any of the rights granted hereunder must enter into a Sublicense. Licensee will provide University with a copy of each Sublicense, and each amendment, restatement and/or termination thereof, within thirty (30) days of execution, and in no event any later than five (5) business days following University's request. Licensee will provide University with a copy of each report received by Licensee from each Sublicensee.

2.4. **Federal Funding.** Licensee understands that Patent Rights or Technical Information may have been conceived or first actually reduced to practice, or during the Term may be first actually reduced to practice, with funding from the U.S. government. All rights granted in this Agreement are limited by and subject to the rights of the United States government, including those set forth in 35 U.S.C. §200 et seq. ("**Bayh-Dole Act**"). Licensee agrees to comply and permit University to comply with the Bayh-Dole Act, including to provide the reporting information required and to substantially manufacture Product and products produced through the use of Product in the United States, unless waived. Licensee is a "small business firm" as defined in 15 U.S.C. §632 and shall promptly notify University of any changes during the Term.

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**ARTICLE 3 - CONSIDERATION**

- 3.1. **Signing Fee.** Within ten (10) business days of the Effective Date, Licensee shall pay University the amount set forth on Schedule 1 listed as the “**Signing Fee.**”
- 3.2. **Net Sales.** Net Sales accrue with the earlier of invoice or provision of Product, whether by sale, lease, transfer, performance or otherwise. Within forty-five (45) days after the end of each Royalty Period, Licensee shall pay University royalties on Net Sales accruing in such Royalty Period in the percentages set forth on Schedule 1. Royalty payments on Net Sales made to University may be credited toward the Annual Minimum for the License Year in which the royalty payment accrues, and only for that License Year.
- 3.3. **Sublicensee Revenues.** Sublicensee Revenues accrue upon receipt by Licensee. Within forty-five (45) days of the Sublicensee’s payment date to Licensee, Licensee shall pay University royalty on Sublicensee Revenue as set forth on Schedule 1. Royalty Payments on Sublicensee Revenue made to University may be credited toward the Annual Minimum payments as set forth on Schedule 1 for the License Year that the Sublicensee Revenue royalty payment accrues, and only for that License Year. Licensee shall not receive Sublicensee Revenue other than in the form of cash payments without written approval from University and agreement with University on the fair market value.
- 3.4. **Annual Minimums.** If total amounts actually paid by Licensee to University under Sections 3.2 and 3.3 for any License Year are less than the amount set forth on Schedule 1 for that License Year (each an “**Annual Minimum**”), after fully crediting amounts paid toward Annual Minimum payments as set forth in Schedule 1, then within forty-five (45) days of the end of the License Year, Licensee shall pay University the amount equal to the shortfall. If this Agreement expires or terminates for any reason, the Annual Minimum for that License Year shall be reduced pro-rata and due immediately upon such expiration or termination.
- 3.5. **Milestone Payments.** Licensee shall pay University each milestone payment set forth on Schedule 1 within thirty (30) days after the occurrence of the corresponding milestone event.
- 3.6. **Payments and Financial Reports.**
- (a) All amounts due to University under this Agreement shall be paid in U.S. dollars, by check or other instrument representing immediately available funds, payable as set forth on Schedule 1. Payments are non-refundable and unless expressly stated herein, non-creditable. If Licensee or any Sublicensee receives payment in a currency other than U.S. dollars, such currency will be converted directly from the currency in the country of sales origin to U.S. dollars on the date payment was made to Licensee or Sublicensee, without intermediate conversions, based on the conversion rate applicable for exchange of Citibank, N.A., in New York, New York, on the date of payment.

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(b) Payments due to the University under this Agreement, if not disputed in good faith by Licensee and not paid when due, shall be subject to a late payment charge of 1.75% of the delinquent amount (or the maximum interest rate permitted by law if less) or \$1.00, whichever is greater, per month on the past due balance, and a past due penalty of \$2.00 per month. In the event Licensee's past due amount is referred for collection, Licensee shall pay a one-time collection fee of \$40.00. Licensee hereby acknowledges that University may refer Licensee's past due accounts for collection and authorize legal action for the collection of past due accounts, and Licensee shall be responsible for all reasonable costs of collection, including reasonable attorney fees and court costs, incurred by University in connection with any such collection activities. The accrual or receipt by University of interest under this Section shall not constitute a waiver by University of any right it may otherwise have to declare a breach of or default under this Agreement and to terminate this Agreement. Licensee authorizes University and its agents to contact Licensee at any telephone number, wireless communication service and/or email address Licensee provides to the University, using automated telephone dialing systems, artificial or pre-recorded voice or text messages, or personal calls, regarding Licensee's obligation to repay any debt owed to University. Licensee understands that others may be able to access University's messages and/or emails, and their content, which may include information regarding Licensee's debt. The accrual or receipt by University of late payments and interest shall not waive any right or remedy University may otherwise have, including to terminate this Agreement in accordance with Section 6.2.

(c) Licensee shall deliver to University a true and complete accounting within forty-five (45) days after the end of each Royalty Period, including the final Royalty Period showing all amounts that have accrued to University during the Royalty Period, the calculation of such amounts on a Product-by-Product basis as set forth on Exhibit A. If no payments are due in a Royalty Period, then Licensee shall submit a report to University so stating.

3.7. **Records.** Licensee shall keep, and shall include in each Sublicense agreement an obligation of each Sublicensee to keep, complete, continuous and accurate records of Products that are made, used, sold, leased or transferred under this Agreement, any amounts payable to University in relation to such Products, and all Sublicense Revenue received by Licensee and its Affiliates in sufficient and customary detail such that the calculations and payment amounts may be verified. During the Term and for a period of three (3) years following the expiration or termination of this Agreement, Licensee shall permit, and shall include in each Sublicense agreement an obligation of each Sublicensee to permit, an independent, certified public accountant engaged by University to audit and copy their respective books and records for the purposes of verifying the accuracy of any reports and payments delivered under this Agreement and Licensee's compliance with the terms of this Agreement, during normal business hours. Such audit shall be conducted after reasonable prior notice by University to Licensee, shall not be more frequent than once during each calendar year and may cover only the three (3) years immediately preceding the date of the audit. Any such independent certified accountant shall be reasonably acceptable to Licensee and, if reasonably requested by Licensee, shall execute Licensee's standard form of confidentiality agreement, and shall be permitted to share with University solely its findings with respect to the accuracy of the royalties and Sublicense Revenue payments reported as payable under this Agreement. The examinations shall be made at University's expense, unless the examination shows a shortage of five percent (5%) or more in the amount of payments made to University prior to notice of the audit, in which case, Licensee shall reimburse University for all costs and expenses, including attorneys' or professionals fees incurred in connection therewith.

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3.8. **Diligence.** Licensee shall use commercially reasonable efforts, and shall include in each Sublicense agreement an obligation of each Sublicensee to use commercially reasonable efforts, to bring Products to market within the Field and throughout the Territory. In partial satisfaction of its obligations to bring Products to market, Licensee shall achieve, or cause its Sublicensee(s) to achieve, the development events by the corresponding dates as set forth in Schedule 1, and shall promptly notify University upon the achievement of each development event, identify whether the Licensee or which of its Sublicensees are responsible for such achievement, and provide the actual date of such achievement.

**ARTICLE 4 - IP MANAGEMENT**

4.1. **Responsibility.** Licensee shall be responsible for filing, prosecuting, defending and maintaining the Patent Rights and Technical Information in accordance with this Section 4.1 using patent counsel reasonably acceptable to University, (the "**Patent Counsel**"). Licensee and its Patent Counsel shall give University the opportunity to provide comments on and make requests of Licensee concerning the preparation, filing, prosecution, protection and maintenance of the Patent Rights, and unless Licensee has a reasonable reason to exclude any such comments, Licensee shall incorporate University's timely comments in any filings made with respect to the Patent Rights. Without limiting the foregoing, at Licensee's request and expense, Licensee shall instruct its Patent Counsel to (a) provide University and its patent counsel with copies of all official actions and other communications received from or submitted to the United States Patent and Trademark Office (and corresponding foreign authorities) with respect to the Patent Rights in the Field and Territory and provide drafts of any proposed response or other submission at least fourteen (14) days prior to any filing deadlines or proposed submission dates for University to review and comment on such response; (b) give University an opportunity to review and comment on the text of each patent application before filing; (c) unless Licensee has a reasonable reason to exclude any such comments, Licensee shall incorporate University's timely comments with respect thereto; (d) supply University with a copy of the application as filed, together with notice of its filing date and serial number; and (e) supply University with copies of information disclosure statements prior to filing and provide University with an opportunity to supplement such information. Licensee shall notify University in advance on its patent prosecution plan as noted in Schedule 1. Notwithstanding the above, if after a review period as noted in 4.1(a) University fails to provide any comment on or before the expiration of fourteen (14) days prior to any filing deadlines or proposed submission dates notified by Licensee, Licensee's obligations under this Section 4.1 shall be deemed to have been fulfilled.

4.2. **Patent Costs.** Licensee shall be responsible for paying all costs and expenses, including attorneys' fees, incurred on or after the Effective Date in connection with the Patent Rights, including the preparation, filing, prosecution, maintenance and defense thereof by its Patent Counsel. In addition, within thirty (30) days after the Effective Date, Licensee shall reimburse University for all documented, unreimbursed, out-of-pocket expenses, if any, incurred by University prior to the Effective Date with respect to the preparation, filing, prosecution, protection and maintenance of Patent Rights.

4.3. **Discontinuation of Support.** If Licensee desires to stop paying future costs or expenses associated with the filing or prosecution of any patent application, or maintenance or defense of any patent, within the Patent Rights, then it shall give prompt written notice to University, and all rights in and to such Patent Rights shall revert to University upon receipt of such

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notice. Upon not less than thirty (30) days prior written notice by Licensee to University, Licensee shall be released from its obligation to pay for the expenses incurred thereafter as to such Patent Rights; provided, however, that expenses authorized prior to the receipt by University of such notice shall be deemed incurred prior to the notice, and Licensee shall remain responsible for payment of all such expenses. For clarity, in addition to and not in lieu of any other rights and remedies, any patent or patent application within the Patent Rights for which Licensee fails to pay any invoice when due shall revert to University, shall be unilaterally removed from the Patent Rights along with all Patent Rights arising from such patent application or patent after the date of exclusion without further obligation to Licensee, and may be freely licensed by University to others.

4.4. **Patent Term Extension.** Licensee shall use reasonable efforts to obtain all patent term extensions or supplemental protection certificates or their equivalents in any country where applicable to the Patent Rights, and as applicable, the Product for which to reference in a supplementary protection certificate, in accordance with the applicable laws of each country where there are Patent Rights. On a country-by-country basis, the parties shall cooperate in seeking such term extensions. Each party agrees to execute any documents and to take any additional actions as the other party may reasonably request in connection therewith.

4.5. **Marking.** Licensee shall ensure all Product are marked with the: (a) Patent Rights in a manner provided for under applicable patent laws; and (b) Field and Territory restrictions, including in a manner sufficient to prevent any implied license.

4.6. **Enforcement.**

(a) If either party becomes aware of any possible or actual infringement of any Patent Rights with respect to Licensed Products (each an “**Infringement**”), that party shall promptly notify the other party and provide it with details regarding such Infringement. Licensee shall have the first right to abate the alleged Infringement in the Field, provided that Licensee has standing to bring an action asserting the Patent Rights without joining University. Licensee may enforce the Patent Rights against the infringer in the Field by appropriate legal proceedings, provided that Licensee employs counsel reasonably satisfactory to University, informs University of all developments in such proceedings, and provides University with all correspondence between it and the infringer including pleadings related to any such action. Nothing in this Agreement is a waiver of sovereign immunity. Should University elect to join in any abatement activity or enforcement proceeding it shall do so in its sole discretion and at its sole cost and expense, with the right to be represented by counsel of its selection. Licensee shall not have any right to surrender or compromise the Patent Rights, to admit the fault of University, its counsel or any inventor on the Patent Rights, to create an obligation on University, or to grant any infringer any rights under the Patent Rights other than a Sublicense subject to the conditions which would apply to the grant of any other Sublicense.

(b) Licensee shall be responsible for all costs and expenses of any abatement and/or enforcement activities with respect to any Infringement, including legal proceedings, which Licensee initiates, including paying all reasonable costs and expenses that University incurs in connection with any abatement activity and/or enforcement proceedings. Recoveries collected by Licensee shall be paid (i) first, to Licensee in the amount of all documented and reasonable out-of-pocket costs and expenses incurred by Licensee in such action, (ii) then to University to reimburse

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University for any of its documented and reasonable out-of-pocket costs and expenses incurred that have not been previously reimbursed by Licensee, and (iii) the remainder, if any, shall be divided [\*\*\*] % to Licensee and [\*\*\*] % to University.

(c) If Licensee elects not to abate any alleged Infringement or to enforce the Patent Rights, then it shall so notify University in writing. Upon receipt of such notice, or in the event Licensee fails to abate or enforce the Patent Rights regarding such alleged infringer within ninety (90) days of notice of the alleged Infringement, University may, in its sole discretion, and at its own expense, take steps to abate the alleged Infringement and/or enforce any Patent Rights, to control, settle, and defend such suit, and to recover for its own account any damages, awards or settlements; provided, that, University shall not compromise or settle any such litigation that would reasonably be expected to adversely affect the license granted to Licensee under this Agreement without the prior written consent of Licensee, which consent shall not be unreasonably withheld or delayed. Licensee shall reasonably cooperate in any such actions, including being joined as a party in such action upon University's written request.

**ARTICLE 5 – REPRESENTATIONS AND INDEMNIFICATION**

5.1. **University's Limited Representations.** As a state entity, University is not permitted to make any warranties. However, University represents as follows:

(a) it is the owner by assignment from the listed inventors of all Patent Rights and the inventions described and claimed therein, and it has the right to grant the licenses to Licensee under this Agreement;

(b) to the best knowledge of its Office of Technology Management (“OTM”), the Patent Rights include all patents and patent applications owned and controlled by University with respect to SERDs as of the execution date of this agreement.

(c) it is body corporate and politic of the State of Illinois and has the power and authority to enter into this Agreement; it has taken all necessary action to authorize the execution and delivery of this Agreement by its representatives who carried out such execution and delivery, and to authorize the performance of its obligations hereunder and it has the right, power and authority to enter into this Agreement;

(d) to the best of its knowledge, the execution and delivery of this Agreement by University and the grant by it of the licenses contemplated hereby will not violate any agreement, instrument or contractual obligation to which University is bound or the policies of it;

(e) to the best knowledge of the OTM, the Patent Rights have been filed and prosecuted in good faith;

(f) it has not received any notice from any third party that any third party patent, patent application or other intellectual property rights would be infringed (i) by practicing any process or method covered by the Patent Rights or by making, using or selling any composition covered by the Patent Rights, or (ii) by making, using, offering for sale, selling or importing Products; and

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**CONFIDENTIAL TREATMENT REQUESTED**

(g) OTM has not received any notice of any Infringement.

Except as provided above, the Patent Rights and Technical Information are provided "AS IS; WHERE IS." EXCEPT AS SPECIFICALLY SET FORTH IN SECTION 5.1, UNIVERSITY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND OR NATURE, WHETHER EXPRESS STATUTORY, IMPLIED OR OTHERWISE, INCLUDING RELATING TO PERFORMANCE, MARKETABILITY, TITLE OR OTHERWISE IN ANY RESPECT RELATED TO THE PATENT RIGHTS, TECHNICAL INFORMATION OR PRODUCT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, REGARDING THE MAKING, USING OR SELLING OR OTHER DISTRIBUTION OF PRODUCT BY ANY PERSON OR ENTITY, THE VALIDITY, SCOPE, ENFORCEABILITY OR PATENTABILITY OF ANY OF THE PATENT RIGHTS, THE ACCURACY OF ANY INFORMATION PROVIDED OR THE ACCURACY, SAFETY, OR USEFULNESS FOR ANY PURPOSE OF ANY OF THE PATENT RIGHTS, TECHNICAL INFORMATION OR PRODUCT.

5.2 **Licensee Representations.** Licensee represents and warrants that: (a) the execution and delivery of this Agreement has been duly authorized and no further approval, corporate or otherwise, is required in order to execute, deliver and perform this valid and binding agreement in accordance with the terms and conditions herein; (b) it shall comply with all court orders and applicable international, national, or local laws and/or regulations in its performance under this Agreement, including export control laws and HIPAA (and require all Sublicensees to do so); (c) it shall diligently pursue the development, manufacture, and sale of Product in the Field and the Territory throughout the Term and comply with the terms and conditions herein; (d) it now maintains and shall continue to maintain throughout the Term and beyond insurance coverage in accordance with Section 5.5; and (e) it is a valid legal entity existing under the law of its state of formation with the power to own all of its properties and assets and to carry on its business as it is currently being conducted.

5.3 **Limitation of Liability.** In no event shall University or its affiliates including their respective trustees, directors, officers, faculty, staff, students, employees, independent contractors or agents (collectively, the "**Representatives**"), be responsible or liable for any indirect, special, punitive, incidental, exemplary or consequential damages, loss of use or lost profits regardless of legal theory or whether advised of the possibility of such damage. Licensee shall not, and shall include in each Sublicense agreement a requirement that that its Sublicensees do not, imply or make any statements, representations or warranties, or accept any liabilities or responsibilities whatsoever that are inconsistent with this Article 5.

5.4 **Indemnification.** Licensee assumes the entire risk and responsibility for the safety, efficacy, performance, design, marketability, title and quality of all Product. None of the University, its affiliates or any of their respective Representatives (each an "**Indemnified Person**") shall have any liability or responsibility whatsoever to Licensee or any Sublicensee or any other person or entity for or on account of (and Licensee agrees and shall include in each Sublicense agreement an agreement of each of its Sublicensees not to assert any claim against any Indemnified Person in connection with) any injury, loss, or damage of any kind or nature, sustained by, or any damage assessed or asserted against, or any other liability incurred by or imposed upon, Licensee, any of its Sublicensees, or any other person or entity, whether direct, indirect, special, punitive, incidental, consequential or otherwise arising under any legal theory, including attorneys' fees, and

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**CONFIDENTIAL TREATMENT REQUESTED**

Licensee shall indemnify and hold each Indemnified Person harmless from and against all claims, demands, losses, damages or penalties, including attorneys' fees, of any third party (each, a "**Claim**") arising out of or in connection with or relating to: (a) Licensee's breach of this Agreement and/or Sublicensees' breach of their respective Sublicense agreements pertaining to the subject matter of this Agreement; (b) the exercise of any right granted, including when resulting in the exhaustion of University's rights in patents other than the Patent Rights as licensed; (c) the advertising, promotion, marking, manufacture, sale, offer for sale, importation, exportation or use of Product, and related product liability therefrom; (d) any act or omission of negligence or willful misconduct by Licensee, and/or Sublicensees; and/or (e) the death of or injury to person(s) or property damage relating to the subject matter of this Agreement; except to the extent of such losses that are attributable to University's breach of this Agreement, gross negligence or willful malfeasance. An Indemnified Person shall provide Licensee with prompt notice of any Claim for which indemnification may be sought pursuant to this Agreement. Notwithstanding the foregoing, the delay or failure of any Indemnified Person to give reasonably prompt notice to Licensee of any such claim shall not affect the rights of such Indemnified Person unless, and then only to the extent that, such delay or failure is prejudicial to or otherwise adversely affects Licensee. University shall cooperate as reasonably requested (at the expense of Licensee) in the investigation and defense of any Claim. University shall permit Licensee to assume direction and control of the defense of the Claim (including the right to settle the Claim solely for monetary consideration); provided, however, that Licensee shall not settle or compromise any claim or allegation subject to indemnification hereunder in a manner that imposes any material obligation on, or makes any admission of fault by, any Indemnified Person (including compromising the validity or enforceability of Patent Rights and/or Technical Information).

5.5. **Insurance.** Licensee shall obtain and carry in full force and effect, and shall include in each Sublicense obligation of each Sublicensee to obtain and carry in full force and effect, insurance with the coverages and limits as are reasonably adequate to ensure that Licensee can meet its obligations to University under this Agreement, including pursuant to this Article 5, the nature and extent of which insurance shall be commensurate with usual and customary industry practices for similarly situated companies, but in any event not less than the amounts set forth on Schedule 1. Such insurance will be written by a reputable insurance company reasonably acceptable to the University authorized to do business in the State of Illinois, will name the University as an additional insured under all general liability and product liability policies and shall require thirty (30) days written notice to be given to University prior to any cancellation, endorsement or other change. Licensee will provide University, for itself and on behalf of any Sublicensee, with appropriate certificates of insurance from time to time as requested by University reflecting the obligations of Licensee pursuant to this Section 5.5.

**ARTICLE 6 – TERM AND TERMINATION**

6.1. **Term.** Unless terminated earlier under Sections 6.2 or 6.3, this Agreement shall expire at the end of the Term.

6.2. **University Right to Terminate.** University shall have the right (without prejudice to any of its other rights or remedies conferred on it by this Agreement or otherwise) to terminate this Agreement if Licensee:

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**CONFIDENTIAL TREATMENT REQUESTED**

(a) fails to pay any amount, provide any other consideration, or make any report when required to be made pursuant to this Agreement, and Licensee does not cure such failure within thirty (30) days after Licensee's receipt of written notice thereof from University;

(b) is in breach of any provision of this Agreement, including failing to meet any requirement under Section 3.8 of this Agreement, and Licensee fails to remedy any such breach within forty-five (45) days after Licensee's receipt of written notice thereof from University;

(c) makes any report to University under this Agreement that is determined by University and confirmed by Licensee, or is otherwise determined pursuant to Section 7.5, to be materially false, and such termination shall be upon Licensee's receipt of written notice from University;

(d) to the extent not prohibited by applicable law (i) commences a voluntary case as a debtor under the Bankruptcy Code of the United States or any successor statute (the "**Bankruptcy Code**"), or (ii) has an involuntary case commenced against Licensee under the Bankruptcy Code, or (iii) has an order for relief entered against it, or (iv) or if the same or any similar circumstance shall occur under the laws of any foreign jurisdiction and, in any of (i) through (iv) above, the application, commencement or filing continues unstayed for, and/or is not otherwise discharged or withdrawn on or before, a period of sixty (60) days; and/or

(e) takes any action that causes any of the Patent Rights or Technical Information to be subject to any lien or encumbrance, and Licensee fails to remedy any such breach within forty-five (45) days Licensee's receipt of written notice thereof from University.

6.3. **Licensee Right to Terminate.** Licensee may terminate this Agreement at any time on written notice to University at least ninety (90) days prior to the termination date specified in the notice and the notice shall include Licensee's justification for such termination.

6.4. **Effect of Expiration or Termination.** Upon the expiration or termination of this Agreement, (i) all rights granted herein shall automatically revert to University and (ii) each existing Sublicensee that is not at such time in breach of its Sublicensee agreement shall have the right upon written request to University, obtain a license from University on the same terms and conditions as set forth herein, which license shall not impose any representations, warranties, obligations or liabilities on University that are not included in this Agreement. Unless this Agreement expires, Licensee shall immediately cease practicing the Patent Rights and Technical Information, and Licensee shall return to University or destroy, as University directs, all of University's Information. Notwithstanding the expiration or termination of this Agreement, neither party is relieved of its rights and obligations that have previously accrued. Terms and conditions of this Agreement that by their nature prescribe continuing rights and obligations shall survive the termination or expiration of this Agreement, including: (i) Licensee's obligation to pay any fees accrued or perform obligations remaining unpaid or unperformed under the terms of this Agreement prior to such termination; and (ii) Licensee's obligations under Sections 3.6, 3.7, 5.3, 5.4 and, to the extent proceedings have been initiated, Section 4.6 this Section 6.4 and Article 7.

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**CONFIDENTIAL TREATMENT REQUESTED**

**ARTICLE 7 – MISCELLANEOUS**

7.1. **Assignment.** This Agreement shall not be assigned or transferred by Licensee without the prior written consent of University except to any purchaser of all or substantially all of its assets to which the subject matter of this Agreement relates, or to any successor corporation resulting from any merger or consolidation of Licensee with or into such corporation. Any conveyance inconsistent with the terms and conditions of this Agreement shall be null and void. This Agreement shall be binding on the parties and their respective successors and assigns and inure to the benefit of the parties and their respective permitted successors and assigns. Notwithstanding anything to the contrary in this Agreement, if this Agreement is assigned by Licensee in connection with Licensee's insolvency, liquidation, appointment over any assets related to this Agreement, voluntary or involuntary arrangement with any of its creditors, ceasing to carry on its business or any similar event under the law of any foreign jurisdictions, this Agreement may only be assigned by Licensee or by any trustee acting on behalf of the assets of Licensee to the extent that the assignee provides evidence reasonably satisfactory to University that such assignee has the capability to perform Licensee's obligations as required by this Agreement.

7.2. **No Third Party Beneficiaries.** The representations, warranties, covenants and undertakings contained in this Agreement are for the sole benefit of the parties and their permitted successors and assigns and shall not be construed as conferring any rights on any third party.

7.3. **Notices.** All notices required or desired to be given under this Agreement, and all payments to be made to University under this Agreement, shall be delivered to the parties at the addresses set forth on Schedule 1, as may be amended unilaterally upon notice in compliance with this provision. Notices may be given by hand or by a nationally recognized overnight delivery service. The date of personal delivery or one day after the date of deposit with the overnight delivery service for next business day delivery, as the case may be, shall be the date the notice is deemed delivered under this Agreement.

7.4. **Severability.** The provisions of this Agreement are severable, and if any provision is determined to be invalid or unenforceable in a given jurisdiction, such invalidity or non-enforceability shall not in any way affect the validity and enforceability of the remaining provisions or the validity or enforceability of those provisions in any other jurisdiction. Any invalid or unenforceable provision will be reformed promptly by the parties to effectuate their intent as evidenced on the Effective Date.

7.5. **Governing Law and Venue.** This Agreement is governed and interpreted under the laws of the state of Illinois, excluding any conflict of laws provisions, and Licensee (a) consents to avail itself of the courts located within the state of Illinois and submits to the jurisdiction of any local, state or federal court located within the state of Illinois; (b) shall not bring any action or claim against University in any other jurisdiction; (c) shall require that its Affiliates and Sublicensees agree not to bring any action or claim against University in any other jurisdiction; and (d) consents to delivery and service of process by means of the notice provisions established in this Agreement. Nothing in this Agreement shall be construed as a waiver of sovereign immunity by or on behalf of University.

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**CONFIDENTIAL TREATMENT REQUESTED**

7.6. **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one instrument. The parties agree that duplicated, electronic, or facsimile signatures shall be deemed original for all purposes.

7.7. **Relationship of Parties.** There is no relationship of principal to agent, master to servant, employer to employee, or franchiser to franchisee or joint venture or partnership between the parties created by this Agreement. Neither party has the authority on behalf of the other to bind the other or incur any obligation.

7.8. **Headings.** The headings of the articles, sections, subsections, and paragraphs of this Agreement including in Exhibits and the Schedule have been added for convenience only and shall not affect the interpretation or construction of this Agreement in any manner.

7.9. **Advertising.** Licensee shall not use, and shall include in each Sublicense agreement a requirement that such Sublicensee not use, the names or trademarks of University or its Representatives any adaptation thereof, including any commercial activity, marketing, advertising or sales brochures without the prior written consent of University in each instance, which consent may be granted or withheld in University's sole and complete discretion. Notwithstanding the foregoing, Licensee may use the name of University in a factual manner in: (a) executive summaries, business plans, offering memoranda and other similar documents used by Licensee for the purpose of raising financing for the operations of Licensee or entering into commercial contracts with third parties, but in such case only to the extent necessary to inform a reader that the Patent Rights and Technical Information have been licensed by Licensee from University, or to inform a reader of the identity and published credentials of the University faculty members listed as inventors of the Patent Rights and Technical Information; and (b) any securities reports required to be filed with the Securities and Exchange Commission.

7.10. **Press Releases.** Neither party shall issue any press release or other similar public communication relating to this Agreement, without the prior written approval of the other party, except for any communications required by applicable laws and regulations.

7.11. **Conflicts.** Licensee acknowledges and agrees that it will use reasonable efforts to avoid potential conflicts of interest between the University and University employees who may also be employees, consultants, shareholders or directors of Licensee. Licensee agrees to cooperate with University with respect to the University of Illinois Policy on Conflicts of Commitment and Interest, available at <http://www.research.uiuc.edu/coi/index.asp>, and to work constructively with University to manage and mitigate any conflicts that may arise in the course of this and related agreements between it and University.

7.12. **Confidentiality.**

(a) Subject to Section 7.12(c), Licensee agrees to maintain, and shall include in each Sublicense agreement a requirement that such Sublicensee maintain the information included in Schedule 1, the Technical Information, and all Confidential Information provided by or on behalf of University hereunder in confidence, and only use Confidential Information as required and permitted by Section 2.1(b). Licensee may (i) disclose Confidential Information to potential Sublicensees or investors, collaborators, underwriters or other financing sources, provided that Licensee shall first obtain from the intended recipient(s) a valid and binding confidentiality

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**CONFIDENTIAL TREATMENT REQUESTED**

agreement which is at least as protective of the Confidential Information as the confidentiality agreement Licensee employs to protect its own proprietary and confidential information, which shall reflect no less than those restrictions on Licensee herein and (ii) file a copy of this Agreement with the U.S. Securities and Exchange Commission, or comparable administrative/regulatory body in other jurisdictions, if such filing is required by applicable laws or regulations; provided, that, Licensee shall endeavor to obtain confidential treatment of economic and trade secret information, and shall provide the University with the proposed confidential treatment request with reasonable time for the University to provide comments, which comments shall be reasonably considered by Licensee.

(b) Subject to Section 7.12(c), University agrees to maintain in confidence and not disclose any Confidential Information provided by Licensee to the individual identified in Schedule 1 as entitled to accept notices on behalf of the University, including all reports provided under this Agreement, and to use such Confidential Information solely as permitted by this Agreement.

(c) If receiving party is required by law, regulation, or court order to disclose any of the Confidential Information, then it may do so provided that it had promptly notified disclosing party, and discloses only such Confidential Information as is legally required. Licensee acknowledges that University is subject to compliance with requests made under the Freedom of Information Act.

(d) Given the nature of the Confidential Information to be provided hereunder and the competitive damage that would result to a disclosing party upon unauthorized disclosure or use thereof, the parties hereby agree that monetary damages may not be sufficient remedy for any breach of this Section 7.12, and, therefore, in addition to and not in lieu of any other rights or remedies, either party may seek specific performance and injunctive and other equitable relief as a remedy for any breach or threatened breach of this Section 7.12 without showing actual monetary damages in connection with such remedy.

(e) The parties may have entered into one or more confidentiality agreements with respect to some or all of the Confidential Information (collectively, the “**Confidentiality Agreements**”) and agree that as of the Effective Date, the Confidentiality Agreements are terminated and this Agreement shall govern the disclosure and use of Confidential Information. Any Confidential Information provided under the Confidentiality Agreements will be treated as a disclosure made under this Agreement.

**7.13. Entire Agreement, Amendment and Waiver.** The Schedule and Exhibits are attached hereto and incorporated herein by reference. This Agreement, including all Exhibits and the Schedule, and any agreements between the parties referenced herein, contain the entire understanding of the parties with respect to the subject matter of this Agreement and supersede any and all prior written or oral discussions, arrangements, courses of conduct or agreements. Except as expressly stated herein, this Agreement may be amended only by an instrument in writing duly executed by the parties. The waiver of a breach hereunder may be effected only by a writing signed by the waiving party and shall not constitute a waiver of any other breach. The delay or failure to assert a right or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver, or excuse a similar or subsequent failure to perform any such term or condition.

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**CONFIDENTIAL TREATMENT REQUESTED**

IN WITNESS WHEREOF, the parties hereto have caused this valid and binding agreement to be executed by their respective duly authorized officers or representatives on the date indicated below.

THE BOARD OF TRUSTEES  
OF THE UNIVERSITY OF ILLINOIS

G1 THERAPEUTICS, INC,

By: /s/ Walter K. Knorr  
Walter K. Knorr, Comptroller  
Date 11/23/16

By: /s/ Mark Velleca  
Name: Mark Velleca  
Title: CEO 11/23/16

Attest: /s/ Dedra M. Williams  
Dedra M. Williams, Secretary  
11/23/16

Approved as to Form  
/s/ MFM 11/23/16  
Office of University Counsel

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**CONFIDENTIAL TREATMENT REQUESTED**

**Schedule 1 to Exclusive License Agreement**

**ARTICLE 1 DEFINITIONS**

Patent Rights

<u>TECH ID</u> <u>PATENT#</u>	<u>PATENT APPLICATION TITLE</u>	<u>APPLICATION #</u>	<u>COUNTRY</u>	<u>ISSUE DATE</u>	<u>PATENT#</u>
[***]	[***]	[***]	US		Provisional
[***]	[***]	[***]	US		Provisional
[***]	[***]	[***]	US		Provisional

Technology

<u>Tech ID</u>	<u>Disclosure Title</u>
[***]	[***]
[***]	[***]

Field means all fields of use.

Territory means worldwide

Technical Information: Document to be appended to this License titled Technical Information.

**ARTICLE 3 PAYMENTS AND REPORTS**

Signing Fee: \$500,000.00

Royalty on Net Sales of Product covered by a Valid Claim: [\*\*\*] %  
(No Royalty stacking)

Royalty on Net Sales of Product not covered by a Valid Claim: [\*\*\*] %  
(No Royalty stacking)

University share of Sublicensee Revenues: [\*\*\*] %  
Annual Minimum License Payments

<u>License Year</u>	<u>Minimum Payment</u>
<u>Due on the:</u>	
1st Anniversary of the Effective Date of the License:	[\$***]
2nd Anniversary of the Effective Date of the License:	[\$***]
3rd Anniversary of the Effective Date of the License:	[\$***]

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CONFIDENTIAL TREATMENT REQUESTED

4th Anniversary of the Effective Date of the License and every anniversary thereafter until first commercial sale: \$[\*\*\*]

On the Anniversary of the Effective Date of the License the calendar year after the first commercial sale and every anniversary thereafter: \$[\*\*\*]

All annual minimum payments are fully creditable against any Royalty payments made by Licensee.

<u>Milestone Event</u>	<u>Payment</u>
Filing of an IND or CTA with the FDA or equivalent for a Product	\$[***]
Dosing of the first patient in a Phase 1 human clinical trial for a Product	\$[***]
Dosing of the first patient in a Phase 2 human clinical trial for a Product	\$[***]
Dosing of the first patient in a Phase 3 human clinical trial for a Product or filing of an NDA or equivalent whichever is earlier.	\$[***]
First Commercial Sale of a Product	\$[***]
First Commercial Sale of a Product in a second country	\$[***]

Licensee, by itself or through its Affiliates or Sublicensees, shall achieve, and promptly notify the University about completion of each of the following Development Events within the time periods specified below, except as set forth below:

<u>Development Event</u>	<u>Achievement Due Date</u>
1. Filing of an IND or CTA with the FDA or equivalent for a Product (subject to footnote 1 below)	[***] 1/
2. Dosing of the first patient in a Phase 1 human clinical trial for a Product	[***]
3. Dosing of the first patient in a Phase 2 human clinical trial for a Product	[***]
4. Dosing of the first patient in a Phase 3 or pivotal human clinical trial for a Product	[***]
5. Submitting an application for market approval to the FDA or equivalent for a Product. Licensee, at its discretion, shall pay a PDUFA fee or equivalent if it accelerates a regulatory decision.	[***]
6. First commercial sale of a Product	[***]
7. Notify the University before the expiration of the last to expire patent within the Patent Rights, Licensee will inform the University if it has or intends to submit an orphan designation for an indication for any Product.	[***]

<sup>1/</sup> If development of the Identified Compounds is terminated by Licensee and a follow-on compound is identified, selected and advanced under the Patent Rights and/or Technical Information by Licensee, then [\*\*\*] shall be added to Milestone No. 1. As used herein, the term "Identified Compound" shall mean the compounds included in the Option Agreement and Synthetic Chemistry Services Agreement by and between the parties and identified as [\*\*\*].

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If at any time during the Term, Licensee believes that it will not achieve a Development Event with respect to any Product, it may notify University in writing in advance of the relevant deadline. Licensee shall include with such notice (a) a reasonable explanation of the reasons for such failure (each, an “**Explanation**”) and (b) a reasonable, detailed, written plan for promptly achieving a reasonable extended and/or amended milestone event (each, a “**Plan**”). University acknowledges that a reasonable Explanation may include adverse experimental, toxicology or efficacy results received in preclinical trials or adverse results achieved in clinical trials with respect to any Product that are beyond the reasonable control of Licensee or to the occurrence of a Force Majeure event. If Licensee so notifies University and provides University with an Explanation and a Plan, the above Development Event will be amended automatically to incorporate the extended and/or amended Development Event set forth in the Plan. If Licensee so notifies University and provides University with an Explanation and a Plan, but the Plan is not reasonably acceptable to University, then University will explain to Licensee why the Plan is not acceptable and provide Licensee with reasonable suggestions for an acceptable Plan. Licensee will have the opportunity to provide University with an acceptable Plan within ninety (90) days, during which time University agrees to work with Licensee in its effort to develop an acceptable Plan. If, within such ninety (90) days, Licensee provides University with a reasonably acceptable Plan, then the above Development Event will be amended automatically to incorporate the extended and/or amended Development Event set forth in Plan.

Checks payable to: [\*\*\*]

Emailnotice: [\*\*\*]  
Include with wire details (anticipated wire amount, origination) and reference this Agreement.

Wire to: [\*\*\*]

**ARTICLE 4 IP MANAGEMENT**

**Article 4.2**

**Total unreimbursed patent costs as of the Effective Date is ~\$500 payable within 30 days of invoicing.**

**Article 4.1 and 4.4 Patent Notification Diligence**

**Event**

Patents entering national entry phase

**Licensee Action Item**

Forty five (45) days before the deadlines for national phase entry Licensee’s Patent Counsel shall notify University in writing of the countries where patent applications will be nationalized.

Validation following notice of allowance in EPO

Within Thirty (30) days of the Decision to Grant from the European Patent Office, Licensee or its Patent Counsel shall notify the University in which jurisdictions a European patent it intends to validate.

Portions of this Exhibit, indicated by the mark “[\*\*\*],” were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant’s application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

Filing of an NDA with the FDA and equivalent in foreign regulatory jurisdictions

Within 60 days of filing an NDA or equivalent, Licensee, or its Patent Counsel will provide written notification to the University explaining its plans for Patent Term Extension or submission of Supplementary Certificates or equivalent by identifying which patent(s), Licensee's Patent Counsel shall seek extensions for, when the NDA or equivalent is approved.

**ARTICLE 5 REPRESENTATIONS; INDEMNIFICATION**

**Minimum Insurance Requirements**

General Liability: (i) \$[\*\*\*] per occurrence, with an aggregate minimum of \$[\*\*\*] for personal injury or death; and an additional (ii) \$[\*\*\*] per occurrence, with an aggregate minimum of \$[\*\*\*] for property damage.

Product Liability: Prior to the first Product testing for or in human, or if such Product does not require such testing, then generation of the first Net Sale or \$[\*\*\*] per occurrence and \$[\*\*\*] in aggregate.

**ARTICLE 7 MISCELLANEOUS**

**Notices**

If to University: [\*\*\*]

[\*\*\*]

With copy to: [\*\*\*]

If to Licensee: INSERT

FEIN:

Phone:

Fax:

**Exhibit A to Exclusive License Agreement**

**Royalty Period** , **to** ,

**Information from Licensee per Product:**

1. Product name, number and description, and applicable Patent Rights and/or Technical Information
2. Units of Product sold, transferred, practiced, performed or otherwise provided and in which country
3. Gross invoice amount for Product
4. Application of foreign currency conversion rate, shown for each currency received for Product

Portions of this Exhibit, indicated by the mark "[\*\*\*]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

**CONFIDENTIAL TREATMENT REQUESTED**

5. Calculation of Net Sales, including deductions
6. Royalty rates
7. Total royalty payment amount
8. Sublicensee Revenue accrued in Royalty Period
9. Calculation of Annual Minimum owed
10. Milestone Payments made during Royalty Period with specific reference to Milestones Event listed on Schedule 1

**Information per Sublicensee shall include the above plus:**

1. Name and address of each Sublicensee:
2. Total amounts reported above, with respect to each Sublicensee

Portions of this Exhibit, indicated by the mark “[\*\*\*],” were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant’s application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.